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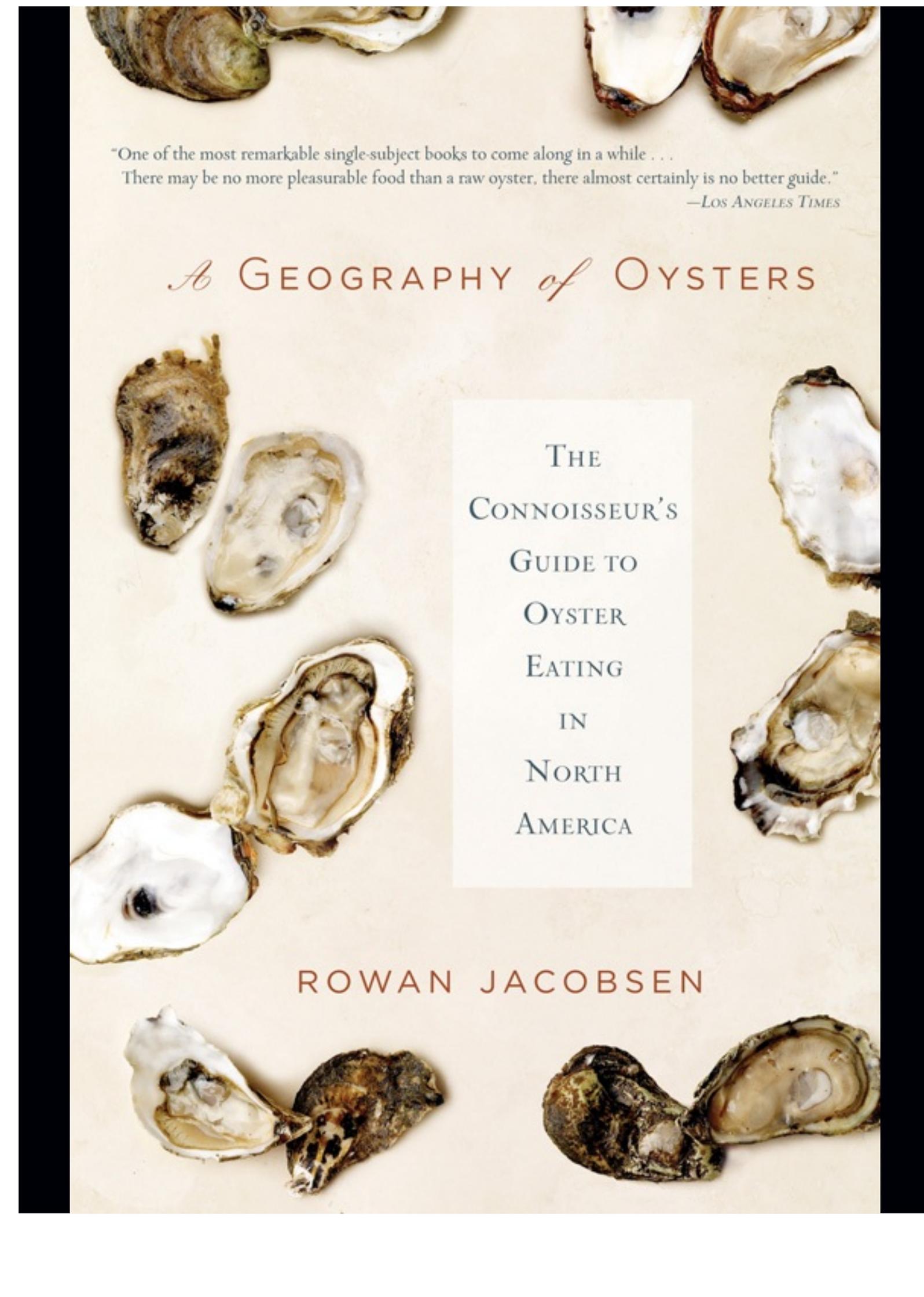
There may be no more pleasurable food than a raw oyster, there almost certainly is no better guide."

—LOS ANGELES TIMES

# *A* GEOGRAPHY *of* OYSTERS

THE  
CONNOISSEUR'S  
GUIDE TO  
OYSTER  
EATING  
IN  
NORTH  
AMERICA

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# A GEOGRAPHY OF OYSTERS

*The Connoisseur's Guide  
to Oyster Eating  
in North America*

ROWAN JACOBSEN

B L O O M S B U R Y

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# HOW TO USE THIS BOOK

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**THIS BOOK IS** designed to make you a more savvy and satisfied eater of oysters. It's divided into three parts. The first, "Mastering Oysters," gives you context. While it's possible to know nothing about oysters and still enjoy them, your experience will be greatly enriched by background knowledge. It's like attending a painting exhibition. Instinctive reactions are important, but most people get more out of an exhibit by reading the accompanying texts and understanding something about the artist, the materials, the movement, and the vocabulary others use to discuss it. Think of an oyster as a minor work of art; knowing something about where it came from, how it came to be, and how it might be described will give meaning to your meal.

The second part, "The Oyster Appellations of North America," provides a guide to the 132 most commonly encountered oysters. It explains the natural and human factors that influence the flavor and appearance of oysters from each area. Rather than reading it straight through, you can use it, along with the Oyster Index at the back of the book, to learn about any oyster you come across in a restaurant or seafood shop. Once you have a few oysters under your belt and are starting to identify the geography of your favorites, use this section to seek out other oysters that have similar provenance, or better still, to plan your own "oyster crawl" in that area.

The third part, "Everything You Wanted to Know About Oysters but Were Afraid to Ask," helps you put your newfound oyster expertise into practice. It's where you'll find information on shucking oysters, serving them, cooking them, pairing them with wines, and so on. It highlights the best oyster bars and festivals, as well as growers who will pull their oysters straight out of the sea and mail them to your door. It also includes information on safety and nutrition, so you can eat oysters worry-free—and help others to do the same.

# INTRODUCTION

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I WAS TWELVE years old when I discovered that raw oysters were the best food on earth and not, as I had assumed, the most disgusting. After a day spent bodysurfing the big breakers out beyond the sandbar at New Smyrna Beach, Florida, my family ducked, sunburned and salt-encrusted, into Stormy's—a real bar. While my mother sidled away toward the safety of some mozzarella sticks, and my younger brothers stared at me with “You're going to put *what* in your mouth?” faces, I climbed onto a barstool next to my father, lifted to my mouth an oyster on the half-shell, slurped it in, gave a few halfhearted chews, and left childhood behind.

I matched my dad, oyster for oyster, through a couple of dozen that day. The first had been a dare, no question, and the second was to prove that the first wasn't a fluke, but I ate the third because there was something vital about the experience that I didn't quite understand but wanted to experience again, and I ate the fourth one because I couldn't stop.

Dad and I killed a lot of oysters back then. They were a dime apiece during happy hour at Stormy's. They weren't even especially good oysters, I know now—likely bought on the cheap from some fetid Gulf Coast backwater—but they were my initiation into another way of eating. In an America where we rarely ate recognizable creatures, oysters were the real deal, unadorned and *live*. This food didn't come to you prepped, cooked, and otherwise altered to make it as pleasing and unthreatening as possible. You had to leave your familiar surroundings, cross the cultural bridge, and risk the wild world.

Then there was the taste. Oysters taste like the sea. This fundamental truth has been pointed out enough times that it is easy to forget how extraordinary it is. *Oysters taste like the sea*. No other food does. Not lobsters, not saltwater fish, not scallops or clams or even kelp. Beef tastes meaty, milk tastes creamy, but the comparison for oysters is not a taste or another food but always a place. And a place—the seacoast—for which many of us have romantic associations. From oysters I learned that what's important about good food is not just what it gives you, but where it can take you.

The next step in my oyster odyssey was easy. South of New Smyrna Beach is Canaveral National Seashore, 220 square miles of wilderness surrounding the Kennedy Space Center. The Atlantic flows through Ponce Inlet and into Mosquito Lagoon, an immense estuary protected by Canaveral's mass. I used to canoe there a lot, amid miles of flat green water and egrets and palm trees and marsh—and the occasional column of fire from a NASA launch. And it was there that I noticed the “rocks” sticking just above the water surface at low tide. Florida has no rocks—it's sand, sand, sand—so these were worth investigating. They were beds of oysters, piled on top of each other, revealed at low tide and hidden again at high. I might as well have come across Spanish doubloons.

Soon I was bringing hammers and a plastic bucket, and returning in my canoe with more oysters than I could eat. Some I would whack off with a hammer and open on the spot, returning the empty shells to the lagoon. This was a revelation. No raw bar required! Those oysters took me out of the suburbs and into a relationship unchanged since prehistory. Was I a Florida eighth-grader in an Ocean Pacific T-shirt or a Timucuan Indian boy cruising the coast? You couldn't have told from my meal.

When I think back on those oysters, I'm first and foremost pleased that I'm not dead. Those were risky oysters. *Vibrio vulnificus*, a parasite that infects oysters and is responsible for a few deaths a year, lives only in warm water. Stick to coldwater northern oysters and your risk is virtually nonexistent. I'll bet the water in my lagoon was 80 degrees Fahrenheit.

I didn't harvest another oyster myself for twenty-five years. That one was in Maine, about as far

from my warm Florida oysters as I could get. On the frigid shore of the Damariscotta River, I pulled up a thick-shelled oyster, held it awkwardly against my thigh, pried it open with a knife, cut its adductor muscle, and dumped it into my mouth. The meat was cool, briny, and brimming with life. I felt full of well-being and deeply connected to the earth—as well I should have. A mile up the river inlet, a two-thousand-year-old shell midden bore testament that humans had been connecting to the earth in just this spot, in just this way, for a long, long time.

My Damariscotta oyster belonged to the exact same species—Eastern (*Crassostrea virginica*)—as the Mosquito Lagoon oyster I'd eaten a quarter-century earlier in Florida, but it couldn't have tasted more different. Where the Florida oyster tasted a bit muddy and soft, the Maine oyster was fresh, firm, and briny as all get-out. It tasted like, well, Maine. And it drove home a point that is central to this book: More than any other food, oysters taste like the place they come from. Oysters are creatures of bays and tidal pools and river inlets, of places where marine and terrestrial communities collide. While they are creatures of the sea, they draw their uniqueness from the land and how it affects their home waters. They have a *somewhereness* to them, like great wines, and in a mass-produced society where most foods don't seem to be from *anywhere*, this makes them special. You can't look at a grape and tell that it's from northern Chile. You can't taste a supermarket rib-eye and say, "Ah, yes, the grasslands of Wyoming." But with an oyster, you can sometimes pinpoint its home simply by looking at it. With a little practice, you can often tell by tasting it. Think of an oyster as a lens, its concave shell focusing everything that is unique about a particular body of water into a morsel of flesh. That's why not only do Florida oysters and Maine oysters taste different, but oysters in one Maine bay taste different from oysters in the next.

The wine term for this is *terroir*, and you'll see it a lot in this book. On one hand, it makes perfect sense to speak of *terroir* with oysters, which exhibit their provenance so precisely. Yet, taken literally, it makes no sense at all. *Terroir*, after all, refers to terra firma, and oysters' terra isn't very firma. But it's a term already familiar to most readers, and speaking of *meroir* would get you laughed out of most restaurants, so *terroir* it is.

So closely is an oyster's flavor tied to its location that oysters are traditionally named for the place they come from. The East and Gulf Coasts, for example, have only one native species of oyster, Eastern, but it goes by many monikers: Pemaquid, Wellfleet, Chincoteague, Malpeque, and Cape Breton, to name just a few. On the West Coast, California's Tomales Bays, Washington State's Hamma Hamas, and British Columbia's Fanny Bays are all Pacific oysters (*Crassostrea gigas*), yet all look and taste different.

This emphasis on provenance is similar to that for European wines. Almost all white Burgundies, for example, are made from the Chardonnay grape, yet a Meursault tastes nothing like a Chablis or a Pouilly-Fuissé. Place is paramount, and the names of both wines and oysters reflect that. Five species of oysters are found in North America, but there are hundreds of appellations. Each appellation produces oysters with distinct characteristics, due to the bay's temperature, salinity, algae, tides, minerals, and many other factors, including the genetics of each bay's population, the age of the oysters at harvest, and the techniques used to cultivate them. Some oysters are insipid, while others dazzle. Learning the geography of all these appellations takes a while, but that's part of the fun. With a little experience, and, I hope, the help of this book, you will soon be navigating oyster lists like an old pro.

It takes great habitat to make great oysters, so when you taste a really superb one, you can take pleasure in knowing that you are tasting the untamed health and beauty of nature. An oyster doesn't taste good because of a food scientist's lecithin; it doesn't taste good because of a winemaker's oak

chips; it doesn't taste good because of the chef's sauce. An oyster tastes good because at one spot in the natural world, something went right. A great oyster is an estuary flashing a thumbs-up sign.

Oysters are not mere avatars of their environment, either. They help create it. Scientists refer to oysters as *ecosystem engineers* because they are the key to maintaining estuaries with stable bottomland, clear water, and a flourishing web of life. Supporting sustainable oyster production helps ensure the continuation of that community.

If you only recently started thinking seriously about oysters, you are not alone. We are entering an oyster renaissance in North America. From Canada to Mexico, from Boston to San Francisco, and even places far from any coast, people are rediscovering that nothing sets the tone for a splendid evening better than a dozen oysters.

It's startling how fast this has happened. Consider Taylor Shellfish, one of the oldest and largest oyster growers on the West Coast. A mere twenty years ago, Taylor sold virtually no oysters in the shell. The entire market was shucked meats. Oysters were something you bought in a can and then fried or stewed. Today, about 75 percent of the oysters Taylor grows are sold live. People no longer want generic oysters in a tub. They want oysters with somewhereness.

With oyster bars springing up on every corner of every metropolis, it's hard to remember that there was a time when most self-respecting chefs couldn't speak knowledgeably about the relative merits of Malpeques and Moonstones. When Tom Madsen of Snow Creek Oysters in Discovery Bay, Washington, started growing oysters in the mid-1980s, he was one of the first to concentrate on the half-shell trade. He went knocking on restaurant doors to try to convince restaurants to try serving oysters on the half-shell. The chef of the local fancy restaurant wasn't swayed. "I think it would look cool," he said, "but it seems like too much trouble." Why? "Well, because first I'd have to take some shells and wash them, then I'd have to take the oysters out of the bucket and put them in the shells." No, no, Madsen explained, he would deliver the oysters *in their own shells*. The chef looked at him, stunned.

Things have changed. Hundreds of varieties of oysters can be had in North America, *in their own shells*. Some are geographical neighbors and taste like it; others are stunningly individual. You may never get to know them all, but there are good reasons to try.

## WHY EAT OYSTERS?

Everybody has a first oyster, and it involves gathering courage, overruling one's instincts, and taking a point-of-no-return leap, like jumping into cold water. You psych yourself up, take the plunge, and afterward you pull yourself out and dry your prickly skin and feel sharp and clean and satisfied. Have you ever heard anyone wade out of the ocean and say, "Boy, I wish I hadn't done that"? So it is with oysters. Once you start, you'll be hooked. I can't make you do it, but I can at least anticipate some of your objections:

**Oysters don't have much taste.** They don't taste like most of our food, it's true. Much contemporary cooking pushes the envelope of sweeter, richer, spicier. Steak with blue cheese on top. Honey in the salad dressing. Wine concentrated to the edge of chewability. If you get used to food that is so desperately eager to please, your palate can become deadened for anything else. Most food is as obvious as a Vegas nightshow: lots of sparkle, lots of jiggle, requiring nothing from us but that we sit back and let it perform. A raw oyster was not designed for our pleasure. Appreciating it is more like catching a glimpse of a fox in the woods: The experience lasts only a moment but leaves us in a

fleeting state of grace. Oysters are not easy or obvious, but few foods so exquisitely balance sweet, salty, savory, and mineral. Few foods so reward our efforts.

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**Oysters are slimy.** Guilty as charged. But so are mangos. So is yogurt. In fact, some of the greatest pleasures in life are slimy. Most adults learn to thoroughly enjoy them. So it's simply a question of appropriate slime. A slimy Happy Meal? Very bad. A slippery oyster? Very good. It's the dry ones that are no fun.

**Oysters are high in cholesterol.** Not so. People used to think all shellfish were high in cholesterol. Now, with better technology for distinguishing cholesterol from other, healthy sterols, we know that only shrimp and squid are high in cholesterol. Oysters, in fact, are astoundingly healthy foods. Nature's multivitamins, they boast an unmatched suite of minerals, vitamins, and omega-3 fatty acids. They are high in protein but low in saturated fat. And, with only about 10 calories per oyster, you'll get broke eating them long before you gain a pound. Considering that you burn almost as many calories shucking oysters as you get from consuming them, they may be the perfect diet food.

**Aren't oysters endangered?** Wild oyster populations were decimated long ago. Those populations bottomed out in the 1970s, are now carefully managed, and today are creeping upward. But almost all the oysters you find on the half-shell are from oyster farms, which are environmentally benign. The farms actually improve the water quality of their bays, and take pressure off wild stocks. Most environmental organizations put farmed oysters at the very top of their lists of sustainable seafood. See my chapter "Sustainability and the Environment: The Case for Oyster Aquaculture" for more information about this.

**Raw oysters aren't safe.** Only if you do several stupid things, like eat the wrong kind of oyster from the wrong supplier at the wrong time of year. The microorganisms that hitchhike in oysters and cause people hardship thrive only in warm waters. A Gulf of Mexico oyster consumed in the summer is risky; a Northern oyster from cold fall waters is safe. On top of that, everything from the health of shellfish beds to the temperature at which oysters are shipped and stored (usually around 40 degrees Fahrenheit) is regulated by the FDA.

**Oysters are expensive.** They certainly are—if you get them in restaurants. They are a sensual splurge. But you can also order direct from growers and save considerably. As live animals go, oysters ship really well. Wherever you live, you can have oysters on your doorstep tomorrow. Better still, hit the road and spend a few days at the source, sampling the coast's oysters and chasing them down with cold local beer. A dozen Olympia oysters from the Olympia Oyster Company costs only five dollars, which may be the most fun you can have for five bucks *anywhere*.

**Will they overexcite my libido?** Take your chances.

**What about that whole live thing?** We may as well tackle that issue right away. If an oyster's shell is clamped shut, the oyster is the one doing it. (Same goes for other shellfish.) Opening the shell by severing its adductor muscle doesn't always instantly kill it, though the writing is on the wall. Don't fret it. An oyster feels no pain and thinks no thoughts. It has no real brain, just a feeble cluster of ganglia. To an oyster, a housefly is a supergenius.

Pain is a nice evolutionary adaptation that encourages organisms to *get away* from the source of the pain—hot stove, grumpy bear, mother-in-law, whatever. It's a way of differentiating good feelings from bad feelings and acting accordingly. But an oyster can't get away. It has but one muscle and one choice in life: open shell or shut shell? If an oyster feels anything touch its gills other than water and plankton, it shuts reflexively. No mulling over the relative pros and cons of the sensation. In any case, oysters go dormant when temperatures drop to around 40 degrees—the temperature they are usually stored and served at. We can feel fairly confident that the short, happy life of a cocktail oyster ends in

cold and blissful slumber.

Left in their natural environment, most oysters would be eaten by something, why shouldn't it be you? For all animals, life involves ingesting other life. That should be celebrated, and oysters are the perfect way to do it. You may not be ready to chase down a rabbit and kill it, but you can shuck an oyster, eat it, and get the primal thrill. It's like going native with training wheels.

Of course, you can also eat cooked oysters. You're still killing them, though your teeth aren't delivering the coup de grâce. For the anti-slime crowd, a few minutes of cooking will firm up an oyster's proteins and turn it into a food that acts, well, more like food. But oysters don't always cook well. When exposed to excessive heat, these most delicate and tender of mollusks lose everything that made them special. The vivacity of the living sea becomes brown, chewy, and dead. You certainly won't taste any *terroir* in an overcooked oyster. Many famous oyster dishes have evolved over time, most of them wretched. If you look carefully, you can find good ones in which the oysters are handled gently so their essence survives. A few of those dishes are in my recipe chapter. The rest of this book is concerned with raw oysters on the half-shell. That is where the fascination and the adventure lie.

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# **MASTERING OYSTERS**

# A DOZEN OYSTERS YOU SHOULD KNOW

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TO BE A full-fledged *ostreophile*—an oyster lover—you can't just pound Kumamotos or Wellfleets all the time. You need to explore the full range of styles and varieties. Different oysters, after all, work best as beer accompaniments, culinary stars, or exotic curiosities. This alphabetical list of twelve prominent varieties provides a good representation of the classic types.

## BEAUSOLEIL

*Néguac, New Brunswick*

These small oysters are grown in floating trays in the harsh New Brunswick climate. Always petite and clean-flavored, in classy black-and-white shells, Beausoleils make ideal starter oysters, with the delightful yeasty aroma of Champagne or rising bread dough.

## BELON OR EUROPEAN FLAT

*Provenance Varies*

No oyster comes close to the power of the European Flat (often called Belon, after the famous French oyster of the same species). It is brassy, in every sense of the word. Brassy because it tastes like metal and because it is shamelessly bold, and because when it hits your tongue it slaps you awake like the opening blast of a bugler's reveille. Try one if you can—just don't make it your first oyster.

## COLVILLE BAY

*Souris River, Prince Edward Island*

*Light* is a term often ascribed to PEI oysters. Sometimes it's a negative, indicating a lack of body and flavor. Sometimes, as with Colville Bays, it means transcendent. Colville Bays have plenty of body but also an addictive lemon-zest brightness. They are the oyster most likely to make you order another dozen. The dusky jade shells, when piled high, achieve the luminosity of moss on a rain-forest stump.

## GLIDDEN POINT

*Damariscotta River, Maine*

Native Americans ate Damariscotta River oysters for a millennium, as the hill-sized middens along its upper banks confirm. The extremely cold, salty water produces slow-growing oysters with fantastic texture and brine at the upper end of the register. These are the soft pretzels of the oyster world, chewy and salty and heaven with a cold beer.

## KUMAMOTO

*California, Oregon, Washington, and Mexico*

The oyster that put the fruit back in *fruits de mer*. Kumamotos are famously melon-scented, sweet, and firm, with none of the bitter or muddy aftertaste that makes some oysters challenging. Closely related to the Pacific oyster, which also was imported from Japan, Kumos stay small and deep-cupped, and

are revered by beginners and pros alike.

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## MOONSTONE

*Point Judith Pond, Rhode Island*

Some of the most savory oysters in the world come from a geographical arc running from the eastern end of Long Island, along the ragged Rhode Island coast, to Block Island, Cuttyhunk, and Martha's Vineyard: the line marking the terminal moraine of the most recent glacier. Along that arc, mineral-rich waters produce salty oysters with unparalleled stone and iron flavors, of which Moonstone is the reigning king.

## NOOTKA SOUND

*West Vancouver Island, British Columbia*

An oyster from pristine waters. Ain't nothing on the Pacific side of Vancouver Island except orcas, salmon, shellfish farmers, and the occasional kayaker. You know these oysters are clean, but clean waters do not necessarily make light-flavored oysters. Art-deco–patterned, lavender-flecked Nootkas in fact, taste strong, with hints of muskmelon and a flavor of cold, slightly sweet raw milk—animal, but good.

## OLYMPIA

*South Puget Sound, Washington*

The only native West Coast oyster, once found from Baja to British Columbia, but now harvested commercially only in southern Puget Sound. These tiny celadon lockets hold delightful treasures: miniature oysters redolent of morels and butter and celery salt. Maddening to open, and maddeningly good.

## PENN COVE SELECT

*Samish Bay and Whidbey Island, Washington*

Gorgeous, ruffled shells holding consistently plump, white oysters with black mantles. Penn Coves are multiyear winners of the West Coast's Most Beautiful Oyster contest. They are a prime example of the "clean finish" style of Pacific oyster—light, salty, fresh, like a cucumber sandwich rolled in parsley.

## RAPPAHANNOCK RIVER

*Topping, Virginia oyster river for centuries.*

Famous as a Chesapeake oyster river for centuries. Of the twelve oysters on this list, Rapps are the quietest. Extremely mild oysters, exhibiting a simple sweet-butter flavor, they are easily overshadowed by saltier or fruitier oysters, so they don't fare well in mixed tastings. But on their own with the most evanescent of wines, they can be delicacy itself—a lesson in the pleasure of minimalism.

## SKOOKUM

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### *Little Skookum Inlet, Washington*

If Penn Coves exemplify the “light and lettuceey” side of Pacific oysters, Skookums show Pacifics at the other extreme. These rich and musky oysters grow fat on the “algae farms”—mudflats—at the head of tiny Little Skookum Inlet, one of Washington’s oldest oyster sites. The brown and green algae that thrive on the mudflats, different from deep-water algae species, give Skookums an aroma of trillium and river moss, more earth than sea.

### TOTTEN VIRGINICA

#### *Totten Inlet, Washington*

The oyster that begs the question: Nature or nurture? By nature, it’s a *virginica*, the East Coast oyster celebrated for its superior texture. But it’s nurtured in the gentle algae baths of Totten Inlet, famous for producing full-flavored Pacific and Olympia oysters. The result is an unlikely yet dazzling mutt—fat and round on the tongue, but cleaner and more mineral than a Pacific. If you prefer the Totten Virginica to Pacific oysters raised in Totten Inlet, then chalk one up for the Eastern oyster. If you prefer Totten Virginicas to East Coast *virginicas*, that confirms Totten Inlet’s revered status.

# THE FIVE SPECIES

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**THE FIVE SPECIES** of oysters cultivated commercially 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. The five species are:

- Eastern (*Crassostrea virginica*)—large, firm, briny
- Pacific (*Crassostrea gigas*)—large, soft, sweet, with cucumber notes
- Kumamoto (*Crassostrea sikamea*)—small, creamy, with hints of melon • European Flat (*edulis*)—medium, metallic, with a trace of
- European Flat (*Ostrea edulis*)caviar and hazelnut • Olympia (*conchaphila*)—tiny, coppery, and smoky
- Olympia (*Ostrea conchaphila*)

These oysters stand in relation to one another a bit like wine grapes do. While their flavors, appearance, and quality will vary depending on where they are grown, they still have certain predictable characteristics. Understanding and describing this territory is a young and evolving art, and comparisons to wine grapes may help:

The **Eastern** is the Riesling of oysters. From the wrong place, it can be simple, one-dimensional, almost flavorless, but when grown in great waters, it can achieve a brilliant subtlety and refinement, transparency of sea and minerals that some consider unsurpassed. The **Pacific** oyster is more like a Sauvignon Blanc, less mineral but far more fruity and aromatic, often having an aftertaste of cucumber, seaweed, melon, or even bitter walnut. Like Sauvignon Blanc, it can exhibit wildly different personalities in different settings, with occasionally strange and challenging flavors. The **Kumamoto** is 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 madding crowd, in search of more challenging and exclusive experiences, just as ex-Chardonnay drinkers have done. Eating the **European Flat** will certainly place you far from the crowd. Even most oyster lovers can't stomach its fish-egg-and-metal flavor. For a wine equivalent, look to the tannic Barolo (from the Nebbiolo grape)—complex, tarry, unapproachable. It doesn't want to be your friend. A friendlier version, still metallic but sweeter, is the little **Olympia**, which we might compare to a Gewürztraminer: unusual, mysteriously smoky, and rich.

## **EASTERN (CRASSOSTREA VIRGINICA)**

When European explorers first saw the bays and harbors of the New World, they were flabbergasted by the oysters. In both size and number, the oysters far surpassed their Old World cousins. “The oyster banks,” wrote one New England colonist, “do barre out the bigger ships.” Partly this was because Europeans had been hammering their oyster populations for centuries, picking off the biggest specimens, while Native Americans had trod more lightly on theirs. But the species differences were also important. The Eastern oysters made the European Flats look like wimps. They grew in massive reefs, stretching for miles and rising twenty feet high. They grew in muddy places that no self-respecting Flat would touch. They thrived in New England cold, Florida heat, and everywhere in between. They fed prodigiously, grew immensely fat, and reproduced at alarming rates.

They were, in short, American.

Europe went bonkers for them. By the eighteenth century, all anyone in London or Paris wanted was an ample American oyster.

*Crassostrea virginica* does not have the strongest taste of any oyster, but it does have the cleanest. It tastes of the sea and not much else, and for that reason it is the oyster against which others should be measured. Once you get attached to the taste of a particular oyster species, you are as unlikely to shift positions as is an oyster itself. Arguments are not uncommon, though they usually end with the combatants toasting each other's health over shellfish and fresh pints of ale. Pacific oyster boosters generally object to the Eastern oyster's muted flavors, intense brine, and general ugliness. European Flat addicts consider other oysters bland to the point of insignificance. The argument for Eastern oysters goes something like this:

1. They are *terroir* itself. Their taste is their environment, plain and simple. Nothing gets in the way.
2. They are native. From the northern reaches of PEI down through Cape Cod and the Chesapeake and on to Apalachicola and New Orleans, they are an essential element of the East Coast. They are far more American than apple pie (apples were brought from Europe by settlers). Aside from the seldom-seen Olympia, the other oyster species—Pacific, Kumamoto, European Flat—are all imports, too. If you want a primordial American dish, unchanged for ten thousand years, it's *virginicas* raw or grilled over coals.
3. They have a little Yankee toughness. Easterners don't always cotton to the way some Pacific oysters fall apart in your mouth. A *virginica* can stand up to a lot of chewing, its flavor evolving all the time. In fact, you have to chew to get much, other than salt, out of a *virginica*.

Now, say I was devoted to Eastern oysters and wanted to present evidence in my argument for their superiority. I'd point to France. The French had enjoyed Flat oysters for millennia, yet when they first got a taste of American oysters in the 1600s, they went hog-wild. Not so Pacific oysters, which had been introduced to the European coast the century before and were considered oysters of last resort. I'd point to Washington and California. A few growers there farm *virginicas*, marketing them as the ne plus ultra of oysters. You certainly don't catch

Easterners growing Pacific oysters. Does this mean the Eastern oyster is better, or just that West Coasters embrace change while East Coasters are mired in the past? Then again, East Coast oyster bars almost always include an assortment of Pacific oysters, while West Coast bars stick to their own

## **PACIFIC (*CRASSOSTREA GIGAS*)**

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 us Northeasterners: Build yourself a strong house and don't show off too much. The Pacific oyster, by comparison, resembles the pagodas of its original Japanese home—all curves and arches, showy colors, and fancy fruit flourishes. No wonder it took off on the West Coast. For this oyster, the living is easy—maybe too easy.

Eleanor Clark, author of the classic *The Oysters of Locmariaquer*, called Pacifics “a coarse species . . . fast growing and used mostly in canning.” It never occurred to her that anyone would eat one given a choice, but then she was a Connecticut Yankee through and through. And at the time and place she was writing (1960s France and New England), not enough attention had been paid to Pacifics. They were still the immigrant oyster that had not yet been granted full citizenship.

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. They shrug 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 *vir-ginica* 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?

Growing *gigas* took some adjustment for farmers used to growing Olympias or *virginicas*. When you grow *virginicas*, the goal is to coax maximum flavor from them. The meats are almost always firm. But *gi-gas* has an abundance of flavors, some of them strange, and a tendency toward softness, so it needs to be managed for a cleaner flavor and slower growth. When *gigas* was first grown in America, people were put off by its black mantle—the outer rim an oyster uses to filter its food. An early advertising campaign by Washington State's Rock Point Oyster Company tried to turn this into plus by urging consumers to “Look for the oysters with the velvet rim.” There's an elegant yin-and-yang quality to *gigas*' black-rimmed, white-fleshed meat that outdoes *virginica*'s gray Atlantic plainness.

The Pacific oyster has taken to its new Northwest home remarkably well. It even grows wild throughout the region. No oyster has benefited so much from modern growing techniques. Today's Pacifics are deeper cupped, smoother shelled, and more refined than their ancestors.

## **KUMAMOTO (*CRASSOSTREA SIKAMEA*)**

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, so I want to hate them. But I 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, too—reliably firmer than that of Pacifics. The meat sits in the shell like a divan, all pillowy 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 those larger plankton contribute bitter or fishy flavors? And do the thinner waters preferred by Kumos have the smaller algae they like, but not the large kinds? So far, no studies have been done.

We do know that Kumos like it warm. They grow very slowly in cold water. They are from the Nagasaki area in southern Japan, which has much warmer waters than the Miyagi prefecture of northern Japan, from which Pacifics hail.

## **BELON OR EUROPEAN FLAT (*OSTREA EDULIS*)**

Almost everybody who tastes a Belon hates it. Even the people who sell them don't like them. One Rhode Island grower told me, "I personally can't stand the flavor. We got big money for them while we had them, but I can't sell very convincingly what I can't stand to eat. 'Here, buy this expensive oyster. It tastes like sucking on pocket change.' " According to a major shellfish distributor, "The surest way to lose a new client is to ship him some Belons."

Which is why I find them endlessly fascinating.

Belons are off-putting and overwhelming, like an anchovy dipped in zinc. Most people can't take them. But if you *can* take them, 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. Somehow, they know. A call goes out, perhaps a phone tree. They appear. They order twenty-four Belons for lunch and another twelve for dessert. Not dainty Belons, either. The true addict wants the platter-sized gaggers, which can run upwards of five dollars apiece and have a crunch like calamari. All the Belon are gone by the end of the day, and the Belon addicts fade into the night, awaiting the next call.

Raw bars that serve European Flats tend to lace their menu copy with coded warnings. "For the adventurous palate!" "A daring and unique oyster!" "The connoisseur's choice!" Buyer beware. It comes down to the Flat's high content of iodine and trace metals, which give it a metallic zing and a stronger flavor than any other oyster. Not everybody wants flavor in their oysters. I do, and I love a good Flat, though I admit I have to work myself up to it. But when your head is in the right place and you are ready to fully commit, an eye-opening experience awaits.

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 don't call them *flat* for nothing.) 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 rubber bands around the shells to keep them closed.)

Removed from the narrow and stable conditions for which they evolved, Flats die faster than neon tetras in an eight-year-old's aquarium. If they get too cold, they die. Too hot, they die. Covered with sediment, they die. Exposed for too long at low tide, they die. Out of the water for more than a few days—dead. They also accumulate higher concentrations of red tide (they don't die; you do).

The spawning time for European Flats is longer because, rather than releasing eggs into the water like *Crassostrea* females, Flat females are fertilized in their shells, where the larvae develop for two weeks before being released. Get a Flat at the wrong time of summer and not only will it harbor little black swimmy things that freak you out, but also a granular crunch from all those nascent shells.

As if all those drawbacks weren't enough to discourage growers from cultivating Flats, the oysters are currently being expunged from the planet by a protozoan known as *Bonamia*, which has the level

habit of killing Flats just as they reach market size. Brett Bishop, a grower in Washington State, told me that one year he wound up paving his driveway with the shells of the most expensive oyster on the planet. He no longer grows Flats. Few do: In both Europe and the United States, Flats account for less than 1 percent of oyster production.

Fascination with Flats goes far back in European history. Pliny called them “the palm and pleasure of the table,” as nice a phrase as you’ll find. Apicius, ancient Rome’s prolific cookbook author, liked to serve them with a fishy aioli—a no-holds-barred combo I’ve reproduced in the recipe chapter. Seneca was the first of many epicures to note their “exciting rather than sating” qualities, which explains why they were required fare at Roman banquets and especially orgies. Rome’s insatiable appetite for oysters required importing them—packed in snow in winter and in saltwater tubs in summer. Bordeaux had a claim to the best, but Brittany, Normandy, England, Spain, Holland, Greece and the Black Sea were all conscripted in the effort to keep Rome in oysters.

The Romans liked garum on their oysters, which staggers the mind. Garum was a sauce made by letting salted fish guts ferment in the sun for months, then draining off the black liquid for use. The best, made of mackerel guts, came from Spain. The combo reeks of decadence, a sure sign of a civilization on the decline. Romans, in fact, poured garum on virtually everything they ate, which must have added an unmistakable tang to the air in the Forum.

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. Belons became the connoisseur’s top choice. 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 stuff the cat back in the bag and reclaim rights to their name, but it proved impossible, and eventually *Belon* came to indicate any Flat from Brittany. When U.S. growers in the 1980s began cultivating the species, they used the name familiar to connoisseurs.

These are scary times for Flats. *Bonamia* is wiping them out worldwide. It infects the oysters’ blood cells, but stays undetectable until the adult oysters simply start to die. No hatchery in the United States is still working with *edulis* seed, because they fear contamination with *Bonamia*. One hatchery in British Columbia is trying to develop disease-resistant strains of Flats from survivors of the *Bonamia* wars. Ireland may also be having some luck in developing *Bonamia*-resistant Flats. But the future survival of this unique oyster is anything but clear.

## **OLYMPIA (*OSTREA CONCHAPHILA*)**

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 (with which they share the genus *Ostrea*), Olympias die if you look at them sideways. They are even less shippable than Flats. Elfin oysters not much bigger than quarters, they hold very little liquid and dry out quickly. If you want them, you must head to the source. Working your way through a pail of greenish-gold Olys in some Puget Sound backwater with Mount Rainier towering whitely on the horizon is one of the great experiences in life.

You won’t get full, however. Start shucking and eating Olympias 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 1900s 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 1980s, 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.

## OTHER SPECIES

In addition to the five species that can be grown legally in North America, you may encounter four others—at least as rumors.

### CHILEAN OYSTER (*ostrea chilensis*)

Chile is one of the only countries—along with Australia, New Zealand, Mexico, and Canada—that has a trade agreement with the United States so that its live oysters can be imported. A few years back, an oyster known as the Chiloe was a big hit at oyster bars. As you can tell from its genus, *Ostrea*, it is a relative of the European Flat, and it tasted like it. Though small, it was as briny and powerful as they come, as well as plump and firm-textured. Being from the southern hemisphere, it was an ideal oyster to eat during our summers, when other oysters might be offline for reasons of spawning or disease. Alas, the Chiloe hasn’t been seen on these shores in several years.

### PORTUGUESE OYSTER (*crassostrea angulata*)

Despite the hurdles of vast distances and lack of refrigeration, Portuguese merchant ships in the sixteenth century managed to accidentally introduce the Pacific oyster from Asia to their own Iberian coast. In France it became known as the *Portuguese oyster*, sensibly enough, where it supplied a demand for cheaper, less refined oysters. One momentous day in 1868, the Portuguese oyster came to France to stay. A ship laden with Portuguese oysters bound for Arcachon had to ride out a storm in the sheltered mouth of the Gironde River, near Bordeaux. By the time the storm had cleared, too much time had passed, and the oysters smelled very dead. The captain dumped his cargo in the water, where the babies stuck to the adult oyster shells flourished—a feat that Pacific oysters would repeat in Washington state’s Samish Bay fifty years later. Soon a massive colony of Portuguese oysters coated the Gironde and spread to other rivers of the French coast, and by the 1920s they had taken over the industry, as Pacific oysters tend to do.

For a long time the Portuguese oyster had its own Latin name and was believed to be a close cousin to *Crassostrea gigas*. Now some people suspect they were originally one and the same, though in isolation the Portuguese developed its own genetic kinks. In any case, with the availability of *gigas* seed, the French oyster industry long ago switched to true Pacifics.

### SUMINOE (*crassostrea ariakensis*)

This Chinese oyster is sometimes known as the Platter oyster in America, due to its size and flat profile, but considering its Asian name of *Suminoe*, its propensity to get immense, and the popularity of the name *Kumo*, it seems inevitable that the oyster will be nicknamed the *Sumo*. Sumos grows anywhere and seem resistant to MSX and Dermo, two diseases that ravage *virginicas* in the Chesapeake Bay, but that may be all they have going for them. The taste is unimpressive, the shell brittle, and the adductor muscle weak, because Sumos aren't designed to survive long stretches out of the water.

Still, disease resistance has been enough to get the Sumo a lot of attention. West Coast growers are playing around with it, and on the Chesapeake, where native stocks of *virginicas* are virtually nonexistent, baymen are lobbying hard to restock the entire bay with Sumos. So far only sterile and experimental populations are allowed, though escapees are reported frequently. If it does get a foothold, the weak-shelled Sumo will work best in the shucked-meat market.

### SYDNEY ROCK OYSTER (*saccostrea glomerata*)

The Sydney Rock Oyster is the native oyster of New South Wales, and it is the Yukon Gold of shellfish. It resembles a Pacific oyster in shell shape and mantle color, but it is smaller, slower growing, and more intensely flavored. Those who dine regularly on Sydney Rock Oysters (something aborigines were doing six thousand years ago) rarely accept anything else. The oysters are rumored to be sweeter and more buttery than any other species—as can be seen in their creamy yellow flesh. The good news? They were just cleared for export to the United States in 2007. The bad news? They are getting muscled out by disease and by faster-growing Pacifics. If you are on good terms with an oyster bar proprietor, it's worth begging him to score some Sydney Rock Oysters to keep you entertained and the industry alive.

# HOW TO GROW AN OYSTER

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I'M THINKING OF an organism. It is ordered as seed from nurseries. The seed looks like grains of sand and requires lots of fresh water. You plant the organism in the dirt. The organism stays put. Once the organism gets big, you come back and harvest it. Would you guess that the organism is a plant or an animal?

Okay, you knew the answer, but otherwise you'd have guessed plant. Oysters, by virtue of their immobility and their knack for getting all their nutritional needs through water, act more like plants than animals. For that reason, people who raise oysters need to think more like farmers than fishermen. Fishermen and hunters simply need to know how to catch their food. Farmers need to *understand* their food. To farm good oysters, you need to know what makes oysters tick.

## BEING AN OYSTER

Say you are an oyster. You and your kin have managed to thrive for several million years with no help from humankind, thank you very much. And, if left to your own devices, that's what you'd keep doing. Here's how you'd do it.

For starters, you wouldn't grow just anywhere. No open sea for you. No, you are a creature of the estuaries, of coves and bays, where fresh river water mixes with the salty ocean, creating a salinity between 2 and 3 percent, and ideally where offshore reefs or barrier islands or peninsulas prevent ocean waves and storms from sweeping you off your perch. Name a protected river mouth in the United States or Canada and you have named a great spot for oysters (pollution aside).

Now, say you are a baby oyster larva, recently ejected from your mother along with a million of your siblings. (At least, if you are a European Flat or an Olympia oyster. If you are an Eastern or Pacific oyster, you were launched from mom and dad as separate sperm and egg that hooked up in the water.) As a larva, you have a few things going for you, along with some serious problems. Your main problem is that you are very small, and pretty tasty, so more likely than not you are going to end your very brief life as lunch. Among the things in your favor are a sticky foot, cilia for swimming, and a rudimentary eye that can sense light and dark. All these things seem very *unoysterlike*, but as a larva you need them all as you swim about, dodging predators, gobbling infinitesimal plankton, sticking close to the surface (hence the eye, for detecting sunlight), and surfing the currents.

After twelve days or so, if all goes well and the planktonic gods are kind, you have grown into a big fat larva, with the beginnings of a shell. Eventually, down you go. Now's the one and only time for your foot to do its thing. As you head for the bottom, bouncing along in the tides, you have a few chances to attach to something with that sticky foot. This is where so many of your siblings go wrong. Only one in ten thousand will find something solid to attach to, or "set," as it's called. The rest will get buried in mud or swept out to sea and end up in any of a thousand hopeless places.

But you are a lucky oyster. You find your favorite substrate: another oyster shell. Rocks and packed bottoms are fine, but nothing attracts you like a shell, occupied or not. It's a good indicator that somebody before you did well in that spot. That's why the first sailors to the New World encountered unfathomable oyster reefs in Chesapeake Bay, New York Harbor, and other estuaries: Generations of oysters had paved the bottom, each generation piling on top of its parents, until the reef rose to the surface and even broke it at low tide.

Once settled in your new home, off go the eye, the foot, the cilia. You'll never travel or see again. As mammals, we have trouble with the concept of jettisoning useful tools as we develop. For us, it's all progress from infancy to adulthood—language, walking, winking, sex. It's hard to comprehend a creature that voluntarily ditches vision and locomotion. We place a premium on them, but evolution decided such trifles were useless to oysters, and made the cuts. It's a bit like being a Hindu mystic. Your life path involves paring down to the bare essentials, making do with less. You find a nice spot, settle into the lotus posture, and do nothing but eat, breathe, and periodically blow off a third of your body mass in one titanic ejaculation.



A baby Eastern oyster.

Once you've reached adulthood, there you sit, merrily sucking seawater—as much as fifty gallons a day—through your slightly parted shells. As it crosses your gills, you strain out the plankton (algae and other microorganisms) and eat it. If a larger particle hits your gills, you automatically spit it out by clapping your shell shut.

Other than eating and not being eaten, you have only two concerns as an adult oyster: sex and winter survival. Your metabolism has everything to do with water temperature. If you live in the temperate waters of Europe, the Northeast, or the Pacific Northwest, sex begins to cross your mind as the water warms up in late spring. Through May and June, you eat like crazy, generating prodigious quantities of sperm or eggs. With all that gamete in you, you taste pretty gamey. This doesn't stop starfish, but does dissuade most humans. As the water temperature peaks in late June or July, you shoot your wad. Afterward, you have a wicked case of *tristesse*. You are smaller, flabby, tasteless, and tired. Food is your only solace.

It takes you about a month after spawning to get your life back together. Then, as water temperatures tick downward, you eat like mad. You pack on the pounds, getting fatter and fatter as fall progresses. You start to taste really good, plump and sweet. When the water temperature hits 40 degrees or so (45 in the Chesapeake), you go dormant and don't feed again until the temperature climbs back above 40. (Your digestive enzymes don't work below 40.) In northern waters, that means that from sometime in November or December until sometime in April, five months or so, you don't eat. Even with your slowed metabolism, you need considerable energy reserves to survive that stretch—hence the urgency to get as fat as possible in the fall. It's no coincidence that oysters are traditional food for Christmas and New Year's Eve; that's when they're at their very best—on the East Coast, at least. The Northwest doesn't experience the same brutal winters. Its oysters have shorter dormancy periods and taste best after the two big algae blooms in spring and fall. Gulf Coast oysters never go dormant. Their flavor depends more on spawning (which they do three or four times a year) than on season.

During those cold winter months, your heartbeat slows to just a few beats an hour. You endure the winter with your shell shut tight, parting it for just a few minutes a day to get a bit of oxygen. The res

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