



By Sam Matey

## Local Leaders: An Exclusive Interview with Zoe Croft of Atlantic Sea Farms

Atlantic Sea Farms is an innovative Maine company growing edible kelp with 24 partner farmers across the Maine coast. In this interview, we hear more about the company, their social and environmental mission, their products, and the rise of aquaculture in Maine from Zoe Croft, retail sales manager at Atlantic Sea Farms.

A lightly edited transcript of this exclusive interview follows. This writer's questions and remarks are in **bold**, Ms. Croft's responses are in regular type. ***Bold italics*** are clarifications and extra information added after the interview.

For more on Atlantic Sea Farms, see [atlanticseafarms.com/](http://atlanticseafarms.com/).



**So, straight out of the gate: what is Atlantic Sea Farms? How did the business start, how did you become involved, and what should the public know?**

Atlantic Sea Farms started in 2009. The founders started the first commercially viable seaweed farm in hopes of introducing an alternative crop to Maine fisheries. ASF is a healthy, domestic alternative to imported seaweed products. We grow skinny kelp and sugar kelp here in the Gulf of Maine. We started getting food service accounts, to restaurants, colleges, fast-casual restaurants, demand took off. In 2018, [Briana Warner](#) (pictured) joined as CEO, and she





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introduced this new economic development and focus on coastal communities, and broadened our focus. ASF partners with Maine fishermen farmers to grow kelp. We have 24 partner farms, we help diversify the income for Maine lobstermen. The Gulf of Maine is warming faster than 99% of the oceans in the entire world, and we're seeing that every year. The waters are warming, the

lobster fisheries are changing. Our goal is to help diversify the income for lobstermen, introduce kelp aquaculture into the Maine seafood industry, and really get ahead of what we think will be a deep change in our working waterfront. Our focus is to get more partner farmers in the water growing regenerative kelp in their off-seasons.

Kelp grows in the winter, which is awesome, because it's counter-cyclical to the lobstering industry. We're getting kelp in there, providing technical support, free seed from our state-of-the-art kelp nursery in Saco, Maine.

We're getting them set up with their leases, the kelp grows, we have a buyback guarantee. We harvest in a

couple of weeks, end of March, beginning of April. And then we bring it back to our facility in Saco, process it, and we make delicious kelp [products](#). Fermented seaweed salad, kelp kimchi, kelp kraut, and two frozen products: kelp cubes, which is just pureed fresh kelp, and a ready-cut kelp, shredded and blanched kelp that's frozen and you can add it to baked goods, salads, noodle dishes, all that stuff.



**Do you see yourselves at ASF in terms of climate adaptation and resilience? The lobster industry in southern Maine is likely to be severely imperiled by warming waters, and you're helping lobstermen attain a new valuable skill that**



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**integrates their working waterfront experience in a new paradigm. Does that factor into your calculations, or is ASF just like “Cool, lots of people are interested in farming seaweed for us?”**

We definitely want to be resilient. We want to offer opportunity. I don't think we could ever replace the iconic Maine lobstering industry, and we don't want to. We want to foster commitment, working with this [amazing, regenerative crop](#) that is super-hyper-efficient, zero input, it has so many benefits. We don't want to replace, we want to help mitigate the effects that climate change is going to have on the lobstering industry. We want to make it so there's a healthy alternative. We now grow more than 90% of the seaweed grown in Maine, and are the largest domestic producer of line-grown kelp in the country. There's nothing but opportunity here, and if we can get our working waterfronts a healthy backup plan for the change we're seeing in rising temperatures, we're doing our jobs, by making this scalable.

**Can you tell me more about how and where the kelp is grown? You have kind of a network of independent farmers, all with their own rope-growing systems, right?**

We work with lobstermen as partner farmers because they have an amazing wealth of knowledge, both social capital on the water-many of them have been lobstering for generations-and they are deeply entwined in their communities.

Having them help champion aquaculture and continue that conversation is amazing. They also know tides, how to tie a knot, protected coastal inlets, they are so knowledgeable.

Which makes them a great candidate for aquaculture, because they come to the table with a lot of the skills that you need to become successful and profitable.

That can be hard in





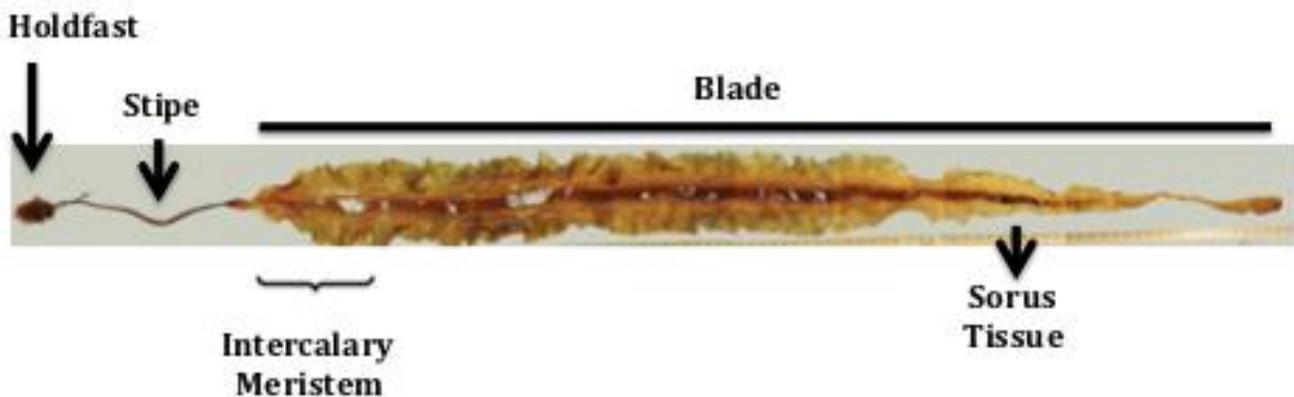
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aquaculture, there's a lot of trial and error, it is fairly new to a lot of communities. Our mission is to drive impact through working with lobstermen. There are thousands of lobster license-holders in the state of Maine, and we're working with only 24, and we're growing 850,000 pounds of kelp this year. That's huge. When you think about the impact that can have in terms of our environmental mission, each of our partner farms removes an average of 4500 to 6000 pounds of carbon from the ocean per year per harvest. In 2021, we're on track to remove 72,000 pounds of carbon from Maine waters. (Pictured: Atlantic Sea Farm kelp). And each farm is really locally mitigating some of the effects of ocean acidification. Kelp is what we call a virtuous vegetable, it cleans and removes some of the nitrogen and carbon in the water, but it also helps other species. Wild kelp forests are some of the most diverse ecosystems on the planet. As storm surge becomes more frequent, as we see the temperatures change, there's a limit on how much you can harvest of wild kelp beds. By farming our kelp, we're adding to the natural ecosystem in the water. It's great for mussels, oysters, we're seeing studies show that the shells of shellfish get stronger if they live near or around kelp and the meat inside them gets bigger because they're feeding off the nutrients the kelp provide. It's this health halo effect, that's really beautiful. And it's good for consumers, kelp's a superfood, it's got iron, magnesium, B12, we're adding to the health of the consumer, the health of our coastal economies and communities, and the health of our oceans. We're really proud of that.



And to go into the nursery piece a little bit, Atlantic Sea Farms has a state of the art kelp nursery XXXXXXXXXXXX We get really strong kelp blades in the ocean, we seek out the healthiest looking wild kelp at the end of summer, beginning of the fall. We bring it to our kelp nursery and dry it out. This makes the kelp feel like it's washed up on shore and it needs to reproduce. The kelp blade grows this center dark line we call [sorus tissue](#). (Pictured: parts of kelp). That releases all these kelp spores. We cut out that middle part of the blade, we put it in a beaker of ocean water and let sit there, it



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becomes a sort of kelp tea, a black color. That then gets poured into big tanks of fresh, circulating salt water, and we have these tubes vertically in the tanks, we pour the beaker of the kelp tea in there, they're all swimming around looking to find somewhere to attach to, and they attach to these tubes. We grow them for several weeks over the fall, and it's a really beautiful process. That grows and has lots of time and attention, we play it music, they slowly start to grow. And that's what we then distribute for free to our partner farmers in November, December, when they're starting to plant their farms. Then it gets distributed to their aquaculture farms, and it's quite a beautiful thing to see. It's really neat, we have the largest kelp nursery.

## **If someone wanted to buy some ASF seafood, where would they go to get it?**

You can find Atlantic Sea Farms all across the country. You can always buy our products online at [atlanticseafarms.com](http://atlanticseafarms.com). You can find us in the North Atlantic region at Whole Foods, Wegman's, Mom's Organic Market. You can find our frozen products at Sprout's Farmer's Market, which has 350 stores across the country. Your local co-ops or independent natural food stores might carry our products. But you can always shoot us an email at [info@atlanticseafarms](mailto:info@atlanticseafarms) and request the local store that you shop at to carry our products. I'm the person that follows up on that, and I would love to get our products into your store. You'll also be able to find our fermented seafood salad in the New York and mid-Atlantic Whole Foods stores starting in April.

## **Can you tell me more about the future plans for the company?**

We want more partner farmers in the water growing kelp. At our core, we are wanting to help working waterfronts diversify in the face of climate change, and the changing economy and ecology of Maine. We want more farmers in the water, farming delicious, nutritious kelp. On the retail side, my mantra for the year is kelp in everything. Not only do I want to be selling kelp, I want kelp in salads, grain bowls, noodle dishes, fish tacos, any tacos. (Pictured: [Sea-chi Breakfast Tacos](#)). I really want to partner with other brands. I want people to be using our products in their delicious products. Wouldn't it be cool to have kelp tartar sauce, or kelp mayo? Or our seaweed in grab-and-go containers at sushi restaurants? As it is, 98% of the seaweed eaten in the US is imported, typically grown in questionable waters with little to no oversight. We're really wanting to focus on a clean,





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domestic alternative that's better for you, that hasn't been dried and dyed and rehydrated. Think about a kale chip and then soaking it in water, and then taking it out of that water and saying



ATLANTIC SEA FARMS  
100% NATURAL KELP



IMPORTED  
(BLUE & YELLOW DYES)

“look at this beautiful kale.” That doesn't have the same nutrient qualities or texture or flavor that a fresh piece of kale does. That bright green seaweed salad you might have gotten on a poke bowl or at a restaurant, there's a reason it looks the same color as Mountain Dew, there's the same dyes being added. We want to introduce a healthy, clean, beautiful product to you. Seaweed has been around for centuries, coastal communities have been eating kelp as a part of their diet for thousands of years. To be able to educate people on what seaweed should really taste like is an important conversation to have. We've all been eating dried seaweed snacks, dried sheets, let's talk about introducing a healthy and fresh version of that. That's what we do at Atlantic Sea Farms.

## Is there anything else you'd like people to know about Atlantic Sea Farms?

I could talk about seaweed forever. Kelp is such an interesting-well, technically, it's not a plant, but you can eat the whole thing. There's no waste. It's a really interesting food system that has so much to give. It's beautiful, it's delicious, there's so many health benefits that can be had from eating kelp. I want everyone that reads about what we're doing to think about healthy food systems and what the future of food looks like. We can really vote with our dollars on the brands we support. By supporting Atlantic Sea Farms, we're driving seafood jobs back to our coast, we partner with other brands or markets or stores. I'm just excited to keep talking with you and share all of the positive things that come from eating kelp and supporting kelp aquaculture. Kelp is a regenerative crop, it needs no fertilizer, no arable land, no fresh water. Aquaculture really doesn't have those same impacts. Go Team Kelp, and hooray for Women's Month- Atlantic Sea Farms is a women-led business. Thank you for having me and for your interest in Atlantic Sea Farms. **Thank you so much!**