

Rockweed doesn't become a fully developed habitat until the plants change their shape from "bushy" (under three feet tall) to "overarching protective canopy" (five to six feet tall). It takes on average 10-12 years for a plant to reach waist height, and another 10-12 years to reach six feet tall. I've brought both heights so you can understand. Growth is slow (3-4" per year on average) and regeneration is by division of stems. The distance between vesicles is the growth in one year. If a plant is harvested according to statute (cut at 16") then 50% of the biomass of bushy plants is removed, and if plants 5-6 feet tall are cut according to statute (cut at 16"), then 99% of the biomass of overarching protective canopy is taken. The specimens on the table will help you to understand this. Acadia Seaplants, a Canadian company, hires locals to cut rockweed with rakes that have a guard set at 5 inches. This is illegal equipment. It should not be allowed. Nina and I live on Gouldsboro Bay, and we photographed a harvester working for ASL who took the long handle off his rake and replaced it with a rope instead. He threw the rake at the plants. He had no depth control whatsoever. We circulated the photos to DMR, and got no enforcement response. They still use the rakes.



As an owner-operator of a small seaweed company, www.theseaweedman.com, I've harvested half a dozen varieties of seaweed sustainably, year after year, for 45 years, going back to the same places time and again, all within a five mile radius of home. I've written www.maine seaweed harvesters.org and there you will find my thoughts on harvesting of rockweed. If a rockweed harvester responsibly cuts rockweed at a height of 36" so as not to destroy habitat, the sustainable yield is one wet ton per 150 feet of shoreline. Steuben has 20 miles of rockweed habitat. That means we have 700 wet tons per year available for harvest without destroying habitat. We have over a thousand mouths to feed, and rockweed is valuable fertilizer that can restore our garden soils and thus provide nutrient-dense food for our families. That means we have less than one wet ton of nutrient-dense fertilizer per person in Steuben. Protecting habitat and conserving our supply through local self-regulation should be our first priority. Our second priority should be the education and encouragement of local owner/operators to become rockweed harvesters. Why? First of all, not all of our gardeners are able to harvest their own rockweed. There is good work to be done for cash or barter for vegetables. Second, when I harvest rockweed as an owner-operator, I realize an income of \$1,000 per wet ton, once the plants are dried and milled and sold directly to customers who are gardeners. This brings a lot of good to my community. If I worked for ASL, I would be paid less than \$50 per wet ton.

I wrote about Harvest Guidelines at www.maine seaweed harvesters.org: The principle is this: For each species, the seaweed harvester and the community need to designate "control" areas where no one harvests, ever. These areas serve to remind us what undisturbed seaweed habitat for each species really looks like. Next, we need robust apprenticeship programs led by harvesters who have come to realize, through decades of experience, that it takes at least three years of guided observation for an apprentice to begin to understand the impact of his/her actions. The first year, the apprentice is simply learning to do the work. The second year, the apprentice has an opportunity to revisit places that were harvested the year before, and the experienced harvester will help the apprentice to understand how quickly or slowly the bed is recovering as a result of the previous year's harvest. Rotational schedules of harvest will be explained, and by the third year, the apprentice will become a more careful observer who is beginning to keep records and sketch maps of specific locations where s/he has worked before. In short, the apprentice is beginning to develop "memory of place".

The Maine Seaweed Council doesn't support three year apprenticeship programs. Scientists have not established true control areas for rockweed that have not been harvested for at least 20 years. The list of researchers who were to be considered by the rockweed working group advising the DMR commissioner was manicured by scientists who work for industry, and thus we don't find descriptions of the rape of Nova Scotia or the landscape scale alteration and damage to habitat in New Brunswick. I asked to be on the committee, and was refused. What I can tell you is that in three years, ASL has destroyed all hope of preserving functional over-arching canopy habitat in Gouldsboro Bay. They did not bother to inquire about my methods for preserving habitat or my rotational harvest schedule for the past 45 years. They simply issued illegal gear to roving pirates who have no loyalty to place or principles of sustainability.

If you've seen Michael Moore's latest movie, "Who Shall We Invade Next?" you know that he commends the Germans for acknowledging the dark side of their past and educating their children about the Holocaust. Signs and plaques are everywhere, just as we Americans put up plaques to say that "George Washington slept here,"---but in Germany, the plaques say things like, "Members of the Weinstein family built this home and lived in it for 125 years. The Nazis killed them in the gas chambers at Auschwitz."

For years I was a member of the Maine Seaweed Council, and I would hear the CEO's of rockweed companies talking about how the king had given the colonists of Massachusetts the rights of "fishing, fowling, and navigation" in the intertidal zone, and Maine was a part of Massachusetts, and the Maine statutes described "fishing" as the taking of marine organisms, and rockweed was that, so fishermen had the right to harvest rockweed, etc. All of this was lumped together under the Public Trust Doctrine, and it seemed to imply that somehow the king had originally protected the rights of fishermen.....but really, he was just encouraging work and commerce so that he would have something to tax, and he never ceded title to the ownership of the intertidal zone.....to anyone! Anyone who comes to me as a scientist organizing landowners to claim the intertidal zone for purposes of conservation land trust is just practicing another form of privatization, no different from a foreign corporation which makes a deal with DMR to be given sectors of the coastline in exchange for some sort of investment in the state. In Ireland, it's been "we'll buy your factory and improve it in exchange for you licensing the resource to us." Licensing the resource? Where does that leave the owner operator? What about the native workers' cooperatives that reserve the right to sell on the open market? Sorry, out of luck. The Public Trust Doctrine is great theater, but the dark side is that we killed the natives who understood that it's a grave error in living to claim ownership of a resource that was here before they were born and will be here after they die. Now rockweed is used as a gelling agent in fracking that is destroying the drinking water of this planet. Greed is a dread disease. I don't care if the disease appears in the form of wealthy landowners, a corporation exploiting workers and a resource, fraudulent scientists in the back pocket of industry, or aristocratic conservation trusts. Rockweed belongs to the natives who can preserve and respect habitat while cooperatively & sustainably harvesting it, applying it to gardens to end hunger.

We trace our laws back to the Magna Carta which established civil and human rights. There were actually two charters, and the second was called the Charter of the Forest. This charter made two demands of the king: government cannot privatize the commons, and government cannot destroy the commons. We are waking up to the fact that this entire small planet is the commons, and we cannot exempt one place on this planet from our ruin of another. When the principles of the Charter of the Forest are applied to the intertidal commons, the gardeners' associations of Maine will let Augusta know that the sustainable harvest of the rockweed resource cannot be assigned to foreign corporations (privatized) through back room deals and the theater of advisory committees that design "management plans" while excluding the natives and owner operators from full inclusion in the process. The rockweed resource and habitat of the intertidal commons cannot be destroyed, as has been done in Nova Scotia, New Brunswick, Ireland, and now Maine. The solution? 36" cutting height, local regulation.