

ROCKWEED HARVEST AND THE PUBLIC TRUST

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Introduction

Maine's annual rockweed harvest is worth approximately \$298,887.¹ With an 8.1% unemployment rate and many fisheries closed as a result of depleted resources and red tide, seaweed harvesting is a rapidly expanding industry. Increased harvesting activities on privately owned intertidal lands have strained relations between landowners and harvesters raising the question: does the public have the right to harvest seaweed on privately owned intertidal lands with out permission?

The answer is likely no. The law recognizes three categories of seaweed—rafting seaweed, seaweed that has been cast up on the beach (alluvial), and seaweed that is attached to the land. Seaweed harvest, whether it is the harvest of alluvial, attached, or floating seaweed does not fall with the scope of the public trust right of fishing. Although there is no public trust right to harvest floating seaweed, a state may create a statutory presumption that seaweed floating in the intertidal zone is offshore seaweed—owned by the state for the benefit of the people. However, right to harvest floating seaweed, derived from a common interest in the resource not the public trust, is limited and does not include a right to enter private property to access the resource. In addition, alluvial and attached seaweed located within the intertidal zone belong to the riparian landowner. Therefore, no one may enter private property to harvest seaweed without the landowner's permission.

In support of this conclusion this paper first discusses the cultural and biological significance of seaweed. It then explores the history and implications of Maine's public trust doctrine. This is followed by a detailed analysis of public trust case law, looking specifically at cases addressing the scope of the public trust right of fishing and ownership of seaweed. Finally, this paper looks at the negative impact of expanding the public trust right of fishing to include seaweed.

Seaweed Generally

Maine's nutrient rich waters support over 250 species of seaweed, including several species of *Fucus* and one species of *Ascophyllum*, commonly known as rockweed. Rockweed is a familiar part of Maine's coastal landscape, inhabiting the rocky substrates of the intertidal zone and shallow sub-tidal areas. An essential part of the marine

¹ *Seaweed Harvest Causes a Stir in Maine*, BOSTON GLOBE, Aug. 10, 2008 [hereinafter *Harvest Causes Stir*]. The article was referring to the 2007 rockweed harvest, which was estimated at 7.5 million pounds.

ecosystem, rockweed helps maintain water quality in bays and estuaries, provides habitat and nutrients for other marine organisms.”²

Despite being a unique form of flora, lacking true leaves, stems, and roots, rockweed is a plant. Like all plants rockweed is photosynthetic—using sunlight to produce food and oxygen. In addition, rockweed absorbs nutrients from the water column through its blades. Accordingly, access to both sunlight and salt water is essential to the organisms’ survival—i.e., if seaweed is tossed up on shore or submerged below the pelagic zone it will die. Rockweed has two mechanisms to ensure that its photosynthetic tissues are effectively exposed to sunlight and its blades are, at least periodically, exposed to water: (1) air bladders keeps seaweed afloat; and (2) holdfasts, sucker-like discs similar to a traditional root structure, attach the plant to the ground. The most commonly harvested forms of rockweed spend their lives attached to the substrate in the intertidal zone and [w]ithout attachment . . . will die.”³

Seaweeds have been harvested in New England since the first settlers arrived from England. Harvesting rockweed by hand from the beaches, the colonists relied on rockweed for subsistence—eating what they harvested or using it as a fertilizer on their crops. In addition, the settlers used seaweed as animal feed, allowing their livestock to graze within the intertidal zone. Today, the seaweed harvesting industry has become big business, with approximately 4 to 7 millions pounds of rockweed harvested annually.⁴ Harvesting methods and end-uses have also changed. Many rockweed harvesters use vacuum powered mechanical harvesters capable of harvesting one hundred thousand pounds of seaweed (50 tons) a day. Although the end product remains, to some extent, the same, “technology has expanded the scope of seaweed use”—today seaweed is used in liquid fertilizer, as a supplement in animal feed, a stabilizer in cosmetics, and for consumption.⁵

The Public Trust Doctrine

In the United State the public’s interest in common property—submerged lands, navigable waters, natural resources within those lands and waters, and wildlife—is recognized in a modified public trust doctrine. Historically, the public trust, the principal that navigable waters are to be preserved for public use, protected the public’s interest in navigation, fishing, and commerce. The doctrine, as it exists in the United States

² MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, VEGETATIVE HABITATS: THE FUNCTIONS AND VALUES OF ROCKWEED 72-73, available at <http://74.125.93.132/search?q=cache:s49AjnrS2iIJ:www.maine.gov/dep/blwq/vol1pt4.pdf+Maine+department+of+Environmental+Protection+rockweed&cd=2&hl=en&ct=clnk&gl=us&client=firefox-a> (last visited Apr. 22, 2009).

³ *Id.* at 72.

⁴ *Harvest Causes Stir*, *supra* note 1.

⁵ Mitchell W. Feeney, Comment, *Regulating Seaweed Harvest in Maine: The Public and Private Interests in an Emerging Marine Resource Industry*, 7 OCEAN & COASTAL L.J. 329, 336 (2002).

today, has been expanded to include elements of the public trust, the submerged lands, and the wildlife doctrines—essentially an amalgamation of the Roman laws of *jus publicum*, *jus privatum*, *jus regium*. Unlike the modern public trust doctrine in the U.S., Roman law distinguished between common rights in, sovereign ownership of, and authority to regulate navigable waters. For example, the Roman law of *jus publicum* was “the common right of unobstructed navigation, commerce and fishing (and perhaps bathing) in navigable waters.”⁶ Distinct from the concept of common rights was *jus privatum*—the Roman emperor’s ownership of and authority to grant exclusive interest in “all navigable waters, submerged lands, and other unappropriated resources.”⁷ Finally, the law of *jus regium* granted the sovereign the authority to regulate *jus privatum* lands and waters for the benefit of the people.⁸

These concepts were later recognized, and merged, by the English common law with an important exception; the Magna Carta prohibited the sovereign from granting exclusive title to tidal lands and navigable waters.⁹ The American colonists, looking to retain the rights they enjoyed as Englishmen, adopted the English common law, including the public trust doctrine, subject to subsequent modification. After the American Revolution the individual states, replacing the crown, succeeded to the ownership of all the property that had previously belonged to the king—tidal and submerged lands and navigable waters.¹⁰ Reverting back to the Roman law, the states were permitted to grant private interests in publicly held property, subject to the rights of fishing, commerce, and navigation.¹¹

Accordingly, in the United States today coastal states have jurisdiction over lands beneath navigable water (submerged lands). In most states submerged lands extend seaward from the high water mark for up to three miles—i.e., in most states the intertidal zone is considered submerged lands and is held by the state in trust for the benefit of the public.¹² In Maine and Massachusetts, however, a 1641/1647 Colonial Ordinance extended private

⁶ Id.

⁷ James L. Huffman, *Speaking of Inconvenient Truths—A History of the Public Trust Doctrine*, 18 DUKE ENV'T'L L. & POL'Y F. 1, 94 (2007).

⁸ Id.

⁹ Id. at 32-33.

¹⁰ Palmer v. Mulligan, 3 Cai 307 (N.Y. Sup. Ct. 1805) (noting that navigable waters and submerged lands belonged to the states, while “every river where the sea does not ebb and flow, was an inland river not navigable, and belonged to the owners of the adjoining soil”).

¹¹ Illinois v. Ill. Cent. R.R. Co., 146 U.S. 387, 452 (1892).

¹² 43 U.S.C. §§ 1331, 1301, 1312. State ownership of submerged lands is derived from English Common Law. Under the English Common Law private owners of waterfront property owned landward of the high water mark in fee simple. While the English Crown held title to all lands extending seaward of the high water mark, including intertidal lands, in trust for the benefit of her citizens. This included ownership of the living marine resources. See also e.g., Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988); Shively v. Bowlby, 152 U.S. 1, 57 (1894).

property rights to the low watermark, subject to a public easement for fishing fowling and navigation.¹³ This easement grants the public a right of access to privately owned land between the high and low water mark (intertidal zone), for the limited purposes of fishing, fowling, and navigation.¹⁴ In summary, under the Ordinance the riparian landowner, whether a private individual, entity, the state or a municipality, owns the intertidal lands in fee simple to the exclusion of the public except for the limited purposes of fishing, fowling and navigation.

Although the Maine Legislature has never expressly adopted the Colonial Ordinance it has become part of Maine's common law through custom and use and the basic concept—that riparian landowners own the intertidal zone to the exclusion of the public, except for public rights of fishing, fowling, and navigation—is well settled law in Maine.¹⁵ Still at issue, however, is the scope of these rights. Since the nineteenth century the Maine Supreme Court has, on a case-by-case basis, been defining the parameters of the doctrine. For example, in Bell v. the Town of Wells, the most recent public trust case, the Maine Supreme Court held that the public trust rights did not include a right of recreation. In considering the extent of the public's rights within the intertidal zone, the Court emphasized that the public's right to access the intertidal zone was limited to the rights reserved by the Ordinance. The Court explained that although in the past it had given, in some ways, a "sympathetically generous interpretation to what is encompassed within the terms 'fishing,' 'fowling,' and 'navigation,'"—including extending it to "reasonably related activities"—it had never "decided a question of the scope of the intertidal-public easement except by referring to the three specific public uses reserved in the Ordinance."¹⁶ Accordingly, the Court refused to extend the public trust doctrine to recreation, because it found that recreation was not even reasonably related to the three activities—fishing, fowling, and navigation—enumerated in the Ordinance. Thus, in Maine if an activity falls outside the scope of fishing, fowling, and navigation the public does not have a right to engage in that activity on privately owned intertidal land without the consent of the landowner.

The Public Trust Right of Fishing Does Not Include the Right to Harvest Attached Seaweed or Seaweed Cast Up on Shore

In defining the scope of the public trust rights the Court has in some ways, given a "sympathetically generous interpretation to what is encompassed within the terms 'fishing,' 'fowling,' and 'navigation.'"¹⁷ However, the Court has also imposed limitation

¹³ Although the Colonial Ordinance of 1646/47 was never expressly adopted by the Maine State Legislature the Maine Law Court found it become a part of Maine's common law through custom and usage. Bell v. Town of Wells (Bell II), 577 A.2d 168, 169 (Me. 1989).

¹⁴ Id.

¹⁵ Shively v. Bowlby, 152 U.S. 1, 18-19 (1894).

¹⁶ Bell v. Town of Wells, 577 A.2d 168, 173, 171 (Me. 1989).

¹⁷ Id. at 173; Barrows v. McDermott, 73 Me. 441, 449 (1882) (holding that the public may fish, fowl, and navigate on intertidal land for business or pleasure); French v. Camp,

on the rights of the public to use intertidal lands for certain purposes—finding that some activities, walking on ice or harvesting clams, are encompassed with the rights of navigation and fishing, while others, harvesting mussel manure or alluvial seaweed, are not.¹⁸ In addition, the Court in Bell, emphasizing that: “Property rights cannot be established by analogy alone,”¹⁹ indicated that any expansion of the public trust doctrine beyond fishing, fowling, and navigation would be a taking of property without just compensation in violation of both the state and federal constitutions,²⁰

Maine’s public trust jurisprudence indicates that seaweed does not fall within the scope of the public trust right of fishing. The law recognizes three categories of seaweed—rafting seaweed, seaweed that has been cast up on the beach (alluvial), and seaweed that is attached to the land. Two of these three categories—seaweed that has been cast on the shore and seaweed attached to the land—from the intertidal zone belong to the riparian landowner. Accordingly, the harvest alluvial or attached seaweed does fall within the scope of the public trust right of fishing. Thus, it is likely that there is no public trust right to harvest seaweed from the intertidal zone and that any attempt to expand the public trust doctrine to include seaweed harvest would constitute a takings.

Offshore Seaweed

Seaweed located seaward of the low water mark is a public resource. States have jurisdiction over submerged lands (lands beneath navigable waters) as well as the natural resources within such lands and waters.²¹ The state holds these resources for the benefit and use of its citizens, subject to regulation.²² In Maine, submerged lands extend seaward from the mean low water mark.²³ Thus, in Maine the public has a right, subject to applicable state regulations, to harvest any seaweed found seaward of the low water mark. This includes the right to harvest both floating seaweed and seaweed growing up of the seafloor.

18 Me. 433 (18410 (holding that navigation includes the right to travel over the water on the ice,); State v. Lemar, 87 A.2d 886 (Me. 1952) (holding that the right to fish includes the right to harvest clams); State v. Leavitt, 72 A. 875 (1901) (holding that the right to fish includes the right to harvest worms); Moulton v. Libbey, 37 Me. 472 (1854) (holding that that the right to fish includes the right to harvest shellfish).

¹⁸ Bell, 557 A.2d at 175.

¹⁹ Bell, 557 A.2d at 187.

²⁰ Id. at 177. *See also* U.S. CONST. amend. V (providing that private property shall not be taken for public use, without just compensation); M.E. CONST. art. 1, § 21 (“Private property shall not be taken for public uses without just compensation; nor unless the public exigencies require it.”).

²¹ 43 U.S.C. §§ 1331, 1301.

²² State v. Leavitt, 72 A. 875, 877 (Me. 1909) (“The Legislature of each state representing the people has full power to regulate a control such fisheries by legislation designed to secure the benefits of this public right in property to all inhabitants.”).

²³ Illinois v. Ill.Cent. R.R., 146 U.S. 387, 452 (1892).

Alluvial Seaweed

It is well settled in Maine that seaweed that is washed up on shore between the high and low water mark becomes the property of the riparian landowner. The reasoning being that accretion—an increase in the land “arising by slow degrees”—belongs to the landowner and that seaweed that is cast ashore “may be considered on of those marine increases.”²⁴ Several Maine and Massachusetts decisions have recognized that “[s]eaweed which is thrown upon a beach belongs to the owner of the beach.”²⁵ Thus, in Maine the seaweed cast up on shore belongs to the landowner.

Attached Seaweed

Attached Seaweed is Private Property

Attached seaweed belongs to the riparian landowner. In the 1861 case of Lord v. Hill, the Court held that “title to seaweed is in the owner of the flats . . .”²⁶ In addition, in reiterating their holding, the Court stated that: “[S]eaweed belongs to the owner of the soil *upon which it grows*, or is deposited . . .”²⁷ Thus, in Maine seaweed growing or deposited within the intertidal zone vests with the littoral owner to the exclusion of the public.

There is No Public Trust Right to Harvest Attached Seaweed

The Court in Lord was not speaking directly to the public trust rights of fishing, fowling, and navigation. The defendant in Lord, charged with trespassing for harvesting seaweed from privately owned intertidal land, claimed that his right to harvest seaweed was derived from a prescriptive easement, rather than the public trust right of fishing. Nevertheless, the dissent in Bell, arguing for a more liberal interpretation of the public trust rights, cited to Lord as an example of the limitations imposed under the public trust doctrine.²⁸ In addition, the plaintiff in Lord asserted his ownership over the intertidal land, ownership that the Court recognized, under the Colonial Ordinance of 1641/47.²⁹ Therefore, it can be presumed that Lord stands for the propositions that: (1) seaweed located within the intertidal zone is the property of the riparian landowner; and (2) harvesting seaweed does not fall within the scope of the public trust right of fishing.

In addition, several state courts, including New York and Rhode Island, have held that seaweed harvest does not fall within the right to fish. For example, in Carr v. Carpenter,

²⁴ Emans v. Turnbull, 1807 WL 886 *6 (N.Y. Sup. Ct. 1807).

²⁵ Phillips v. Rhodes, 48 Mass. 322, 325 (1843). See also Anthony v. Gifford, 84 Mass. 549 (1861); Hill v. Lord, 48 Me. 83, 96 (1861).

²⁶ Lord, 48 Me. 83, 86 (1861) (emphasis added).

²⁷ Id. at •12.

²⁸ Id. at 175 (J. Waltham, dissent) (citing Hill v. Lord, 48 Me. 83, 86 (1861) (explaining that in Lord the Court had “prohibited the taking of seaweed from the flats of another”).

²⁹ Hill v. Lord, 48 Me., at *5, *9 (Rice, J. On Report of the Evidence).

the Rhode Island Supreme Court held that “[t]he right to take seaweed is not one of the rights which the state holds in trust for the public, like navigation or fishery, but a private right in the shore” . . . which belongs to the littoral landowner.³⁰ In reaching this conclusion the court relied on the New York case of Emans v. Turnbull.³¹ In Emans, a trespass case involving seaweed harvested from privately owned land subject to a contractual easement for fishing and fowling, a New York appellate court held that the easement to fish and fowl did not include the right to gather seaweed.³² More specifically, the court held that the “right of . . . fishing and fowling, does not give the right of taking wood, grass, or any thing appurtenant to the ownership of the soil, including seaweed.”³³

The Maine Supreme Court Has Never Held that Seaweed Harvest is Part the Public Trust

Marshall v. Walker,³⁴ is only public trust case in Maine that mentions seaweed harvest. Decided in 1900, Marshall has been held out as a declaration of the activities that “fall[] within the reserved public trust rights of the Ordinance of 1641/1647.”³⁵ In Marshall, the Maine Supreme Court, resolving a dispute over ownership of “certain uplands and flats” noted, that the owner of the flats had the right of actual possession over intertidal zone, subject to certain rights, which he shares with the public. According to the Court these rights included the right to “land and walk upon them . . . fish the waters over them . . . take sea manure from them.”³⁶ The Court also set forth a series of activities that the public did not have a right to engage in within the intertidal zone—the right to take shells or mussel manure.³⁷

The Court’s reference to sea manure in Marshall has been cited as authority supporting the argument that seaweed harvest is part of the public trust. This is simply not true. Not only is this list dictum, it includes activities, such as “walking upon” the soil,” which the Court has explicitly held are not part of the public trust.³⁸ In addition, the Court in Bell explicitly stated that: “Marshall v. Walker is no authority for permitting public use of intertidal land for general recreational purposes.”³⁹ Moreover, it is unclear what the

³⁰ Carr v. Carpenter, 48 A. 805, 805 (R.I. 1901) (referring to Emans v. Turnbull as “exactly on point,” because in New York the “fee of the shore is in the state, except as it has been given to others by patent”).

³¹ Id. at 806.

³² Emans v. Tunbull, 2 Johns. 313 (1807).

³³ Id.

³⁴ 45 A. 497 (Me. 1900).

³⁵ See DAVID SLADE, POSITION PAPER FOR THE SEAWEED COUNCIL OF MAINE 5 (2008).

³⁶ Marshall v. Walker, 45 A. at 498.

³⁷ Id.

³⁸ Bell v. Town of Wells, 557 A.2d 168 (Me. 1989) (holding that recreation, including walking along a privately owned beach, does not fall within the public easement reserved out of the grant of private ownership by the Colonial Ordinance).

³⁹ Id. at 174.

Court meant by sea manure. Although the Court mentions both sea manure, which may refer specifically to seaweed or be a general term describing “organic detritus and waste of marine organisms,”⁴⁰ and mussel manure, it does not define either term. Thus, it is unlikely that the mention of a right to harvest sea manure in Walker grants a public trust right to harvest seaweed under the public trust doctrine.

Although the Public May Have a Common Interest In Floating Seaweed There is No Public Trust Right to Harvest Floating Seaweed It

It is likely that the public has a common right in floating seaweed, however, it is unlikely that this right is derived from the Ordinance of 1641/47. It is clear that the public has a right, subject to regulation, to harvest seaweed found below the low water mark, regardless of whether that seaweed is floating or growing on the sea floor. Although there is no legal distinction between floating seaweed and attached seaweed located offshore, the public's right to harvest seaweed within the intertidal zone may turn on whether the seaweed is attached via holdfast, cast ashore, or free floating. For example, it has been suggested that Anthony v. Gifford, a Massachusetts case decided the same year as Lord, recognizes a public trust right to harvest floating seaweed from within the intertidal zone. In Gifford, two riparian landowners, being sued for confiscating seaweed harvested by another from the intertidal land abutting their property, challenged a statute that authorized the taking of “kelp or other seaweed between high and low water mark while it is actually adrift in tidewater.”⁴¹ Specifically the defendants argued that the definition of the word “adrift” as used in the statute and applied to the facts of their case was erroneous. Disagreeing with the defendants, the Court held that “[s]ea-weed between the high and low water mark . . . which during flood tide is moved by each rising and receding wave, is adrift, within the meaning of [the statute], although the bottom mass may touch the beach.”⁴² Thus, the Court found that the seaweed, which was adrift in the intertidal zone at the time of harvest, was not the property of the defendant landowners, because the plaintiffs had a right to harvest the seaweed pursuant to the authority granted by the statute.⁴³

Rather than holding that there is a public trust right to harvest seaweed the court upheld the statute's presumption that seaweed that is adrift in the intertidal zone is offshore seaweed. If offshore seaweed is owned by the state and seaweed cast up on the intertidal land is the property of the littoral owner it becomes very difficult to identify who owns the seaweed when the tide comes in. Floating seaweed is migratory, it has the ability to transcend the geographical boundaries that the courts have established to identify ownership of the natural resource.

⁴⁰ MAINE SEA GRANT, ET AL., PUBLIC SHORELINE ACCESS IN MAINE: A CITIZEN'S GUIDE TO OCEAN AND COASTAL LAW 4 n.10 (2004).

⁴¹ MASS. GEN. LAWS ch. 83, § 20 (1859).

⁴² Anthony v. Gifford, 84 Mass. 549 (1861).

⁴³ Id. at 550.

It is quite possible that the Massachusetts legislature was, in enacting Mass. Gen. Law ch. 83, § 20, attempting to resolve the conflict while protecting both the public's right to the harvest offshore seaweed and landowners' property rights. It is important to note that the statute only applies to seaweed "that is actually adrift." In addition, the definition of adrift—unattached seaweed, which during flood tide is moved by each rising and receding wave—limits the harvest of seaweed on intertidal lands to high tide. Thus, the statute created a presumption that when the intertidal lands were submerged, seaweed "moved by the rising tide . . . wholly uncertain where they may find a resting place"⁴⁴ was offshore seaweed owned by the state. Finally, it is often difficult to distinguish between seaweed that is floating freely and seaweed that is suspended from a holdfast attached to the intertidal floor. Thus, it makes sense that the Massachusetts court would include floating seaweed "although the bottom mass may touch the beach"⁴⁵ because to enforce or abide by a rule that distinguished the two would be nearly impossible. Thus, the public right to harvest seaweed "adrift" in the intertidal is because the seaweed is owned by the state, not because it falls within the scope of the public trust right of fishing.

There is No Common Interest In Attached Seaweed, Therefore, Harvest of Attached Seaweed Does Not Fall Within the Public Trust Right of Fishing

Although there is a common interest in floating seaweed, seaweed that is attached to the soil belongs to the landowner. The Court in *Lord*, holding that harvesting "seaweed is a right to take profit from the soil," made an important distinction: unlike fish, oysters, shellfish, and worms, capable of transcending geographical boundaries, things, such as seaweed, that are attached to the earth are a product of the soil and as such belong to the landowner.⁴⁶ This comports with the longstanding legal principal that fee simple ownership of real property includes ownership of the land and objects that are permanently affixed to the land, such as trees or buildings. Therefore, the riparian landowner owns in fee all "wood, grass, or anything appurtenant to the ownership of the soil" located on intertidal lands.

Prior to the Colonial Ordinance of 1641/47 the state, as the owner of the intertidal zone, owned these resources, because they owned the land that the trees and grass were attached to. When the government transferred ownership of the intertidal lands to the upland owner they also transferred ownership these resources. The transfer did not, however, transfer private ownership of the fish, shellfish, worms because state ownership of those resources was not linked to state ownership of the land—the state owned those resources because they were incapable of private ownership. In short, the riparian landowners now own anything attached to the soil within the intertidal zone, while the public continues to have a common interest in any wildlife located on the lands. Therefore, the public trust right of fishing may grant public access to fish, worms, and shellfish on private land, because these resources are owned in common. However, any

⁴⁴ Id.

⁴⁵ Id.

⁴⁶ Lord v. Hill, 48 Me. at •12.

attempt to create a common interest in things attached to the soil, which are private property, absent just compensation, would constitute an unconstitutional appropriation of private property.

Seaweed is “appurtenant to ownership of the soil.”⁴⁷ Similar to trees and grass, rockweed that is anchored to the land via holdfast is permanently affixed to the property. It is no more apt to move, unless ripped from the rock, than a tree rooted to the soil. In addition, similar to trees and grass, ownership of attached seaweed can be determined by its location. It follows that seaweed that is attached to the soil is the property of the landowner—i.e., private property. Therefore, the public does not have a right to harvest attached seaweed from privately owned intertidal lands.

Furthermore, the cases recognizing a common interest in floating seaweed are consistent with this analysis. The transient nature of floating seaweed raises the same issue as wild animals: how can you tell who owns it if it has no set location? Thus, the distinction between floating seaweed, seaweed cast up on the beach, and attached seaweed that has emerged from public trust case law is more of a practical distinction than a declaration that seaweed is part of the public trust right of fishing.

U.S. Supreme Court Case Law

It has been suggested that Illinois Central Rail Road Co. v. Illinois,⁴⁸ prohibits private ownership of seaweed on intertidal lands because it “would effectuate a transfer of ownership of seaweed ‘entirely beyond the direction and control of the State.’”⁴⁹ Specifically, the argument is that if, in transferring public land to private ownership, the 1647 Ordinance also transferred ownership rights in the resources on those lands the Ordinance would violate the U.S. Supreme Courts ruling that “trusts connected with public property . . . cannot be placed entirely outside the direction and control of the State.” It is also suggested that this reading is the only way to reconcile the Ordinance of 1641/47 and the holding in Illinois Central. **This is simply not true.** Illinois Central, which concerned the transfer of submerged lands and not marine resources, did not prohibit a state from alienating public lands, rather it held that a state could transfer public lands so long as it did not interfere with the public interests in fishing, commerce, and navigation.⁵⁰ Thus, the Ordinance of 1647, which transferred publicly owned intertidal lands to private upland owners subject to a public easement for fishing fowling and navigation, comports with the holding in Illinois—the transfer did not interfere with the public trust right of fishing, commerce and navigation. It follows that if seaweed harvest falls outside the scope of the public trust right of fishing (or navigation or commerce), privatization of the resources by the 1647 Ordinance is not in conflict with the holding in Illinois Central.

⁴⁷ Emans v. Tunbull, 2 Johns. 313 (1807).

⁴⁸ 146 U.S. 387 (1892).

⁴⁹ See SLADE, supra note 35, at 14 (quoting Illinois Central 146 U.S. 387, 542 (1892)).

⁵⁰ Ill. Cent. R.R. Co., 146 U.S. at 542.

In addition, even if the seaweed on the intertidal lands is privately owned, the state will continue to have the authority to regulate it—i.e., exercise direction and control over the resource. Although the state, which holds public trust resources for the benefit of the people, has the authority to regulate these resources under the public trust doctrine (and arguably non-public trust property to protect public trust resources), the state may also exercise its police powers to regulate non-public trust resources.⁵¹ For example, under the Shore Land Zoning Act the State indirectly regulates timber harvest on private property “[t]o aid in the fulfillment of the State’s role as trustee of its waters” even though the state does not own the shore lands subject to regulation, “and to promote public health, safety and the general welfare . . .”⁵² Similarly, the state regulates wetlands located on private property, despite having no ownership interest in some of these wetlands. There is no question that seaweed growing below the low water mark is the property of the state, to be held for the people, and may be regulated to protect the public’s interest in the resource. However, all seaweed, regardless of where it is located plays a vital role in the health of the marine ecosystem by providing nutrients and shelter to other marine organisms. The intrinsic link between seaweed and the rest of the marine ecosystem means that the harvest of the resource will impact other marine resources, and livelihoods dependent upon those resources. Thus, it is likely that the state has the authority to regulate seaweed harvest to protect the health and well-being of its citizens, regardless of who owns the resources.

Scope of the Public Trust Doctrine

Under the Colonial Ordinance of 1641/47, the public’s right of access to privately owned intertidal lands is limited to “fishing, fowling, and navigation.” Although there is language indicating that fishing, fowling and navigation should be construed “much more liberally in favor of the right reserved,”⁵³ and that these rights should include reasonably related activities,⁵⁴ the public’s rights are still limited to those enumerated by the Ordinance. If the rule of law is no longer tied to the public trust rights of fishing, fowling, and navigation, or if the connection becomes too tenuous the citizenry is left with a public right in all things—anything that a judge or public official deems that the public values at any point in time.⁵⁵ The consequence is that then there is no “rule of law because there is no bounded concept to constrain the judge.”⁵⁶ For example, if the public trust right of

⁵¹ So when a vocation, naturally lawful, or the mode of exercising it, inflicts injury to the rights of others, or is inconsistent with the public welfare, it may be regulated and restrained by the state by the exercise of its police power, by which persons and property are subjected to all kinds of restraints and burdens in order to secure the general comfort, health, and prosperity of the state. State v. Snowman, 94 Me. 99, 46 A. 815, 818 (holding that licensing requirements for hunting and fishing guides were a permissible exercise of the state’s police powers) (citing Inhabitants of Dexter v. Blackden, 93 Me. 473).

⁵² 38 M.R.S.A. § 435.

⁵³ Commonwealth v. Alger, 61 Mass. 53, 94 (1851).

⁵⁴ Bell v. Town of Wells, 557 A.2d 168, 174 (Me. 1989).

⁵⁵ Huffman, supra note 7, at 96.

⁵⁶ Id.

fishing includes harvesting seaweed, which is neither a fish nor an marine animal, then why not other intertidal vegetation, such as eelgrass, salt marsh grasses, such as *Spartina*, spike grass, any of the other plant species in Maine salt marches, or even beach sand itself? What is the limit on the public rights?

An all-encompassing public trust doctrine has a more profound impact in Maine and Massachusetts, where expansion of the doctrine chips away at the private property rights of riparian landowners. Intertidal lands in Maine are private property. In the United States, individual states have the authority to define the boundaries of their public trust doctrine so long as they afford it no less protection than that mandated by Illinois Central—i.e., transfers of public land are permissible if they are in the public interest and do not abrogate the public's right of navigation. Thus, the Colonial Ordinance, which reserved the public's rights of fishing, fowling and navigation, permissibly granted upland owners a possessory interest in intertidal lands. To expand the public trust right of fishing and allow access for any number of other activities would deny the landowner the right to exclude the public and “[i]f a possessory interest in real property has any meaning at all it must include the general right to exclude others.”⁵⁷

Conclusion

In summary, the law recognizes three categories of seaweed—rafting seaweed, seaweed that has been cast up on the beach (alluvial), and seaweed that is attached to the land. Seaweed harvest, whether it is the harvest of alluvial, attached, or floating seaweed does not fall with the scope of the public trust right of fishing.

Furthermore, although there may be a right to harvest certain categories of seaweed, this right is derived from common ownership rather than the Colonial Ordinance of 1641/47. A state may create a presumption that seaweed floating in the intertidal zone is offshore seaweed—owned by the state for the benefit of the people—granting the public a right to harvest floating seaweed within the intertidal zone. However, the right to harvest floating seaweed, derived from a common interest in the resource rather than the public trust, is limited and does not include a right to enter private property to access the resource. Alluvial and attached seaweed located within the intertidal zone belong to the riparian landowner and may not be harvested without their permission.

⁵⁷ Bell, 557 A.2d at 178.