Nathaniel Jarvis Wyeth Oregon Dreamer

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In February, 1834, a report by Harvard Botanist Thomas Nuttall was read to a meeting of the Academy of Natural Sciences of Philadelphia. It began:

"This collection was made wholly on the returning route of Mr. W[yeth] from the Falls of the Columbia [Celilo] to the first navigable waters of the Missouri... The number of the species and their interest to the botanist will therefore be duly appreciated, and particularly when it is known that this was the first essay of the kind ever made by Mr. W. and yet I can safely say, that besides their number, there being many duplicates, they are the finest specimens probably, that ever were brought from the distant and perilous regions of the west by any American collector." (A Catalogue of a Collection of Plants, Nuttall 1834).

The plants in question were gathered during Nathaniel Wyeth's 1832-1833 expedition to the Oregon Country, a trip undertaken not for science, but for business. Wyeth was a native of Cambridge, Massachusetts. In 1831 when the siren song of the Oregon Country called, he had a good job in a successful ice harvesting firm. Envisioning a green pasture for shrewd Yankees, the thirty-year-old Wyeth organized a commercial venture that failed economically,

but set the stage for the Oregon Trail, which brought a tide of American settlement to the region. Wyeth was not trained as a naturalist but he was a founding member of the Massachusetts Horticultural Society and was already building up an orchard when he departed for the West.

Cambridge lies across the Charles River from Boston. Fresh Pond in Cambridge is one of many kettle ponds left in New England by retreating glaciers. It freezes over in the winter and by the early 1800s the ice was being cut and sold commercially. Nathaniel Wyeth invented tools and techniques that greatly increased the productivity of the ice trade, making a major export business possible. He was, by 1831, making \$1200/year and had further business interests that brought him, he said, "as much more."

The prime commercial opportunity in the Pacific Northwest was, of course, the fur trade, but Wyeth did not set his aspirations so narrowly. He planned ventures in fishing and tobacco farming and told his brother, "My plan ... is to raise 50 men to go out to that country so early as to leave St. Louis on the 1st May 1832 for the purpose of following the trade of that country in all its branches for which we deem ourselves competent." The enterprise would be a joint stock company, with the participants as shareholders but himself as sole director. It was envisioned to last five years, after which a further, larger, venture could

be initiated. In the trade business, Wyeth would rub elbows with operators of various corporate models. Such players included the Hudson's Bay Company (a multinational corporation), the Rocky Mountain Fur Company (a partnership), the expedition of Benjamin Bonneville (backed by the wealthy John Astor), and "free trappers" (operating on their own). Wyeth was different. As an entrepreneur, he raised capital to run a company of his own. Predictably, his correspondence in preparation for the trip





Moss phlox: Wyeth's specimen at Harvard, left, and Nuttall's illustration, right. Cropped image from herbarium sheet *Phlox muscoides*, GH00091720. Gray Herbarium of Harvard University. The illustration was originally published in the Journal of the Academy of Natural Sciences, volume VII part I, 1834; the digital version was acquired from the University of Toronto Gerstein Science Information Centre (https://www.biodiversitylibrary.org/page/24676677#page/79/mode/1up).

Kalmiopsis Volume 24, 2022

involved much juggling of money, of which there never seemed to be enough. Wyeth raised all the cash for his expedition himself; the other participants earned their shares by virtue of their labor.

Wyeth's Yankee practicality as an ice industrialist stands in sharp contrast to his blind optimism about prospects in the Oregon Country. He knew little about the territory itself, or the difficulty of the journey to reach it. He knew equally little about beaver trapping, salmon fishing, and tobacco farming. Wyeth simply assumed that opportunities abounded and that the fruits were there for the taking.

Wyeth's first expedition

Wyeth's first expedition left Independence, Missouri on May 12, 1832, traveling in company with experienced fur traders. Early in the journey west, men began deserting. In the Rocky Mountains, there was a major firefight with the Blackfoot tribe. As the party pressed on, men continued to quit and by November Wyeth was a company of one, staying at Fort Vancouver in the hospitality of John McLoughlin. Wyeth had reasoned that if men were engaged as shareholders, they would be willing to work

hard for an eventual reward. But he failed to anticipate that if his venture ran into difficulties (dimming the likelihood of an eventual reward), men who were not being paid wages would see no reason to stay with the operation. Wyeth collected but few beaver pelts, and there would be no fishing for salmon and no cultivation of tobacco. Furthermore, the ship that Wyeth sent to bring trade goods from Boston to the West Coast wrecked on a Pacific island. Failure was complete, and he wrote in his journal, "I am now afloat on the great sea of life without stay or support but in good hands i.e. myself and providence and a few of the H.B. Co. who are perfect gentlemen."

Wyeth did not commit many botanical observations to his journal, but he did make two notes regarding trees in the Pacific Northwest. On October 7, 1832, on the way to Fort Walla Walla, he wrote, "...we passed through an immense forest of pine of different kinds and unknown to us altho[ugh] very similar to some of ours..." These would likely have been ponderosa, lodgepole, and Western white pines, the latter being much like the Eastern white pine that graces New England. On November 29, 1832, venturing up the Willamette River, he writes, "On the bottoms there is consid[e] rable oak of a kind not found in the states but of excellent quality for ship building and is the

only kind of oak found in the country of the Columbia." This was Oregon white oak (*Quercus garryana*).

Wyeth managed to induce two of his former party to join him on the arduous return journey one not to be taken alone. It was on this return trip that Wyeth collected the specimens that were celebrated by Thomas Nuttall, who was curator of the botanical gardens at Harvard. Some of Wyeth's specimens may be viewed online at https:// kiki.huh.harvard.edu/databases/specimen_index.html (search for collector "N. J. Wyeth").

Thomas Nuttall named two flowering plants in Wyeth's honor: Clematis wyethii and Wyethia helianthoides (white mule's ears). He noted that the former appeared closely related to Clematis douglasii. Of the latter, he wrote: "In the valleys of the Rocky Mountains, near Flat-Head river, in rich plains. Flowering





Wyeth buckwheat: Wyeth's specimen at Harvard University, left, and Nuttall's illustration, right. Cropped image from herbarium sheet of *Eriogonum heracleoides*, GH00036370. Gray Herbarium of Harvard University. The illustration was originally published in the Journal of the Academy of Natural Sciences, volume VII part I, 1834; the digital version was acquired from the University of Toronto Gerstein Science Information Centre (https://www.biodiversitylibrary.org/page/24676677#page/79/mode/1up).



Wyethia helianthoides grows abundantly in the Ochoco Mountains; hybrids between it and W. amplexicaulis have creamy flowers (Wyethia x cusickii Piper). Photo by Cindy Roché.

about the beginning of June. The root of this plant is, I believe, no less than those of the preceding genus [Espeletia helianthoides], employed for food by the aborigines after fermentation [in the ground] and exposure to a parboiling heat."

Wyeth kept a letter-book, and on July 4, 1833, he penned the following to Thomas Nuttall:

"Dear Sir: I have sent through my brother Leon[ar]d of N. York a package of plants collected in the interior and on the western coast of America somewhere about Latt. 46 deg. I am afraid they will be of little use to you. The rain has been so constant where I have been gathering them that they have lost their colors in some cases, and they will be liable to further accident on their route home."

This letter suggests that Wyeth sent two packages of plant specimens and the first one was lost. His letter indicates that some plants were collected "on the western coast," but when Nuttall published the new species (Nuttall 1834) all of the collections were from east of Celilo. And Nuttall made no mention of any specimens damaged by water. In July 1833, when Wyeth wrote this letter to Nuttall, he was in the Rocky Mountains (present day Idaho), on his way back to Massachusetts. His return was briefly delayed by an unexpected opportunity to start a joint trapping operation with Benjamin Bonneville. Because this venture would have occupied Wyeth for another year, his letter would have been carried east by someone else. The arrangement with Bonneville quickly fell apart, after which Wyeth

pushed towards home immediately. The indicated parcel of plants collected from the west coast, however, was apparently not with him. A letter written the same day to Leonard—to whom the package was supposed to go—makes no mention of it. And Wyeth wrote Nuttall, "I have sent" rather than "I am sending" the package. Such a parcel, dispatched from the Fort Vancouver area, could have gone overland through Canada (courtesy of the Hudson's Bay Company) or by ship from the lower Columbia. Either way, it was apparently lost.

Wyeth's second expedition

By November 1833, Wyeth was back in Cambridge, making preparations for a *second* trek to Oregon, his enthusiasm for the fur business undiminished by the dismal results of the first trip. He had learned many lessons from his expedition. He started as a complete tenderfoot and returned as a man reasonably

experienced in the ways of the West. He also observed a key business fact that propelled him towards a second venture: the American fur companies were procuring their trade goods in Missouri and carrying them overland to the Rocky Mountains. They paid high prices for the goods and incurred steep costs in transport. Wyeth realized that there was another way. Goods could be bought cheaper on the East Coast and sent by ship to the Columbia. Once there, horses to transport the goods inland could be had at much lower prices than in Missouri and the eastward route to the interior was shorter and less dangerous than the trek westward. Furthermore, the ship could then be used to carry furs back to Boston and the cost of the voyage met by bringing back cured salmon to complete the load in the ship.

Wyeth's insights were perfectly valid, but in his ardor for big profits in the West he seemed to forget the obstacles that had plagued his first expedition. A key factor in any successful business venture is the proper estimation—and mitigation—of risk. He would again be faced with unreliable employees, uncertain communications, loss of pack animals (exhaustion, straying, injuries), Indian attacks, accidents, illness, and maritime casualties. And from the start of his second foray, he had less money than he needed, even in his own opinion, and spent it faster than he anticipated.

The shining hope that motivated the 1834 expedition was a contract he had signed with members of the Rocky Mountain Fur Company at the rendezvous of fur traders in 1833. He agreed to bring them a supply of trade goods—goods that he would still need to carry overland,



White mule's ears (*Wyethia helianthoides*) illustration by Thomas Nuttall. The illustration was originally published in the Journal of the Academy of Natural Sciences, volume VII part I, 1834; the digital version was acquired from the University of Toronto Gerstein Science Information Centre (https://www.biodiversitylibrary.org/page/24676677#page/79/mode/1up).

but that he could purchase in Boston and New York at favorable prices. This would give Wyeth's new firm, the Columbia River Fishing and Trading Company, an immediate source of profit. A ship with a cargo of Wyeth's own trade goods would be dispatched to meet him on the Columbia and fulfill his larger plans for harvesting fur and salmon.

Wyeth departed Independence, Missouri for the Oregon Country on April 28, 1834. He did not serve as the botanist on this trip, for Thomas Nuttall was now a member of the party. The Harvard curator had resigned his post to take this extended journey. He and John Townsend rode out ahead to collect specimens before the plants were crushed under the hooves of the numerous horses and cattle of the large expedition. After an arduous trek, Wyeth

reached the Green River in Wyoming on June 19th. There, he met the Rocky Mountain Fur Company, which reneged on the contract, refusing to pay for the trade articles. In his journal, Wyeth complained of the "scoundrels" he had to deal with, but he should have known that fur traders were high-risk customers. He pushed further west and used the unsold articles to set up his own trading post, Fort Hall, on the Snake River, not far from modern-day Pocatello, Idaho. This location eventually became an important stop for wagon trains headed to the Oregon Territory.

Wyeth arrived at Fort Vancouver on September 14, 1834 and learned that his ship, the *Mary Dacre*, was anchored further downstream. The crew were to have set up a salmon fishery and begin curing fish from the summer run. But it was not to be. The vessel, while sailing in the Atlantic off the coast of South America, was struck by lightning. Captain James Lambert wrote:

...at 6 o'clock in the morning, lightning struck our main top-gallant mast head, stove that into splinters, descended down the top-mast splitting that into pieces, through the main cap splitting the main mast head and down the mast, between the eyes of the lower rigging and mast to the deck, where it exploded with a most tremendous report. It ripped up the deck



Nathaniel J. Wyeth. Portrait courtesy of the Museum of the Mountain Man, Pinedale, Wyoming.

amidships, the partners and coaming off the mast and went into the hold, where the electrick fluid separated again, one part flying aft through the Cabin door, staving everything in pieces in its course, but the other most fatal ball passed out through the Brig's side close to the water's edge, starting off all the bends amidships, and a great quantity of the copper, leaving the Brig on fire inside, and filled with sulphuric smoke.

It's ironic that one of Wyeth's reasons for favoring ocean delivery of trade goods to the Columbia was that subsequent overland transport from Vancouver to the Rockies was safer than carriage there from Missouri. He ignored the hazards of the sea, which was quite strange given that the vessel for his first expedition was a total loss. The *Mary* Dacre limped all the way to Valpariso, Chile, where the crew largely deserted while slow and expensive repairs were made to the ship. The ship reached the Columbia River only shortly before Wyeth did, and far too late for the salmon run that, by chance, proved miserably small anyway. With no fish to subsidize the transport of beaver skins, there was no point in sending the ship back to Boston that year and Wyeth resolved to keep the vessel at hand in the hope that the following year would bring a piscine cargo.

In addition to botanist Nuttall, Wyeth's party included ornithologist John Townsend who kept a journal covering more than just avian matters. After the expedition reached Fort Vancouver, Townsend joined an excursion up the Willamette River, where he noted, "...the timber is generally pine [fir?] and post oak, and the river is margined in many places with a species of willow with large oblanceolate leaves like those of the peach, and white on their under surface [Salix scouleriana]." He further wrote that the islands in the river have oaks, but no pines. Townsend's journal is generally much more literary than Wyeth's, and he captured some of the emotions of the exploration:

"None but a naturalist can appreciate a naturalist's feelings—his delight amounting to ecstasy—when a specimen such as he has never before seen, meets his eye, and the sorrow and grief which he feels when he is compelled to tear himself from a spot abundant with all that he has anxiously and unremittingly sought for."

Wyeth proceeded to set up his own permanent installation on the Columbia. He chose the site of an abandoned native village on Wapato (now Sauvie) Island. This would serve as the base for the next year's salmon fishing, and he set his men about the tasks of building barrels and storehouses. Fort William resembled a country village with carpenters, smiths, and other artisans as well as numerous domestic animals. Wyeth traveled up the Willamette River to find land suitable for farming. While the purpose of the farm was to supply produce for Fort William, Wyeth curiously did not consider Wapato itself as a location (it still hosts farms today). Wyeth settled on a parcel near

what was known as French Prairie, not far from modernday Champoeg, roughly 40 miles from his home base on Wapato Island.

With affairs in the lower Columbia left to his lieutenants, Wyeth turned his attention back to the interior country and beaver. Carrying the trade articles brought by the *Mary Dacre*, he led a group of his men back upriver to Fort Walla Walla. But once he got there, twelve of the members deserted, taking considerable property with them. Wyeth spent weeks chasing after them, a trek that brought him back down the Columbia with a major side excursion up the Deschutes River in the dead of winter. Storm-bound one night with his trapping companion, he wrote in his journal:

"It makes two individuals feel their insignificance in the creation to be seated under a blanket with a fire in front and 3½ feet of snow about them and no telling when it will stop. Tonight 'tis calm and nearly full moon. It seems to shine with as much indifference as the storms blow and whether for weal or woe we two poor wretches seem to be little considered in the matter. The thoughts that have run through my brain while I have been lying here in the snow would fill a volume and of such matter as was never put into one, my infancy, my youth, and its friends and faults, my manhood's troubled stream, its vagaries, its aloes mixed with the gall of bitterness and its results: viz under a blanket hundreds perhaps thousands of miles from a friend, the Blast howling about and smothered in snow, poor, in debt, doing nothing to get out of it, despised for a visionary, nearly naked, but there is one good thing plenty to eat: health and heart."

He finally caught up with some of the scofflaws at Fort Vancouver, recovering none of his goods, but catching some beaver along the way. Back at Fort William, Wyeth turned to preparations for fishing. He had told his backers that a large haul could be caught, "...when the proper mode is found." But Wyeth underestimated the effort



Fresh Pond in Cambridge, looking west-northwest. Fort Vancouver lies three thousand miles in the distance. Photo by the author.

Wyeth's legacy

The species named in honor of Nathaniel Wyeth by Thomas Nuttall, British botanist at Harvard, were collected on Wyeth's 1832 Expedition's return journey (eastbound). Wyeth's connection to Nuttall was his cousin, John Wyeth, who was a neighbor of Thomas Nuttall in Cambridge. Nuttall published the names for the 1833 collections in the Journal of the Academy of Natural Sciences Philadelphia in 1834: Clematis wyethii, Eriogonum heracleoides, Wyethia helianthoides, and Espeletia amplexicaulis.

Nuttall had arrived in Philadelphia in 1807 and taught for a time at Harvard. He spent 33 years exploring the North American continent during which time he was a member of the Academy of Natural Sciences in Philadelphia. Nuttall did not return east with Wyeth on his second expedition, instead he sailed from the west coast to the Hawaiian Islands in December 1834. He returned to the Pacific Northwest in the spring of 1835 and continued his botanical explorations for another year before sailing back to Boston from San Diego in May 1836. By sheer chance he booked passage on a ship where one of his former student was serving as sailor. (Richard Henry Dana, Jr. wrote Two Years Before the Mast based on this voyage). Many species in Oregon bear Nuttall's name, but his botanical discoveries are necessarily another story.

Wyeth's collections whetted the appetite of naturalists, and when the second expedition left Independence in May 1834, in addition to Nuttall, it included ornithologist John Kirk Townsend. The entourage also included 70 men, 250 horses, and Baptist missionaries Jason and Daniel Lee with their cattle, so the botanists

Large populations of *Wyethia amplexicaulis* grow on seasonally wet clay soils in the Ochoco Mountains. Photo by Jennifer Curtis.

found it necessary to ride far out ahead to obtain samples before they were trampled. The route they followed became known as the Oregon Trail; missionaries were soon followed by settlers. More than 270,000 emigrants eventually stopped at Fort Hall on their journey. Although Wyeth did not cross the Mississippi again, he encouraged many American settlers to go west, speaking with a voice of authority as someone who had been there.

Plants named for Wyeth

Even though Montana can claim most of Wyeth's type specimens, a number of those species are also part of Oregon's flora. Given the fluidity of taxonomic names, it is not surprising that many of the species that Thomas Nuttall named for Nathaniel Wyeth no longer bear his

The type specimen for Wyeth clematis (*Clematis wyethii* Nutt.) was collected "towards Flat-Head river, and in flower on the 25th of June 1833." In 1885 it was considered a subspecies of Douglas clematis (*Clematis douglasii* subsp. *wyethii* (Nutt. ex Torr. & A. Gray) Kuntze). The currently accepted name for this clematis is *Clematis hirsutissima* Pursh., sugarbowls. In Oregon, this clematis grows primarily in the Blue Mountains, extending southwest into the Ochoco Mountains.

The buckwheat that Wyeth collected at the "sources of the Missouri" in early June 1833, *Eriogonum heracleoides* Nutt., still bears the common name Wyeth buckwheat.

Wyeth collected white mule's ears (Wyethia helian-

thoides Nutt.) about the beginning of June 1833 "in the valleys of the Rocky Mountains, near Flat-Head River, in rich plains." In Oregon, white mule's ears grow in the Blue Mountains, extending into the mountains of the northern Basin and Range in southeastern Oregon.

Wyeth collected northern mule's ears (Wyethia amplexicaulis (Nutt.) Nutt.) in 1833 in "habitat about Flat-Head river." Nuttall's original name was Espeletia amplexicaulis in 1834. This species is widely distributed in eastern Oregon.

Narrow-leaved mule's ears (*Wyethia angustifolia* (DC.) Nutt.) was originally published as *Alarconia angustifolia* DC. by Augustin de Candolle using a collection by David Douglas as the type specimen. Nuttall moved it to *Wyethia* in 1840. Narrow-leaved mule's ears grows in western Oregon.

-Cindy Roché and Kareen Sturgeon.

needed to catch a whole ship's worth of fish, especially by his inexperienced men. In the end, he landed less than

half the salmon expected.

Wyeth shipped out what beaver and fish he had aboard the *Mary Dacre* and returned overland to Massachusetts. Along the way, he still grasped for ways to turn his business around, to no avail. He eventually sold Fort Hall and the goods at Fort William to the Hudson's Bay Company, but the value of these assets was insufficient to cover the \$20,000 he invested in the two expeditions.

Return to his roots

Back in Cambridge for good, Wyeth returned to ice harvesting at Fresh Pond, prospering through the success of his own company. That he should have made his fortune close to home in a familiar trade, rather than far afield in unproven ventures, seems wholly appropriate for a Yankee businessman. The New England work ethic, after all, did not call for flights of fancy. But for other explorers, the western territory would still yield great returns.

John Townsend wrote in his *Narrative of a Journey* (Townsend 1999 OSU reprint) of the potential for sci-

entific discovery:

"What valuable and highly interesting accessions to science might not be made by a party, composed exclusively of naturalists, on a journey through this rich and unexplored region! The botanist, the geologist, the mammologist, the ornithologist, and the entomologist, would find a rich and almost inexhaustible field for the prosecution of their inquiries, and the result of such an expedition would be to add most materially to our knowledge of the wealth and resources of our country, to furnish us with new and important facts relative to its structure, organization, and natural productions, and to complete the fine native collections in our already extensive museums."

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