Henry David Thoreau and Agricultural Journals on Sorrel (Rumex)

Sorrel is represented by numerous species in New England, but sheep sorrel (*Rumex acetosella*), a small herb, is common as a weed in pastures and fields. In pollen records it appears along with ragweed and grasses as one of the main indicators of widespread deforestation and region-wide increase in farming following European arrival in the northeastern U.S. See the manuscripts by Liz Almgren on the ecology of sorrel in the MV bibliography for additional information. In our modern landscape sorrel also appears in forests like those on Martha's Vineyard that have developed on former agricultural sites, when the forest canopy is removed and the soils are disturbed or exposed to sunlight and warmth. This is the case across large areas of the Woods Reserve following the broad-scale mortality of the oak forest due to caterpillar infestations in the late 2000s.

As is usual when one goes to understand the ecology of New England landscapes o the relationship between the landscape's history and its modern characteristics there is much to be learned by referring to the journals and other writings of Henry Thoreau. See *Thoreau's Country. A Journey through a Transformed Landscape* (D.R. Foster; Harvard University Press, 1999) for additional information. Many of the quotes below are included in that volume. Others come from Journal of Henry David Thoreau, Volume 5, 1997. Princeton University Press.

In 1854, the American naturalist Henry David Thoreau also described his impression of the Massachusetts landscape in his Journals, but his view was very different from the early colonists observations.

"The sorrel now reddens the fields far and wide. As I look over the fields thus reddened in extensive patches, now deeper, now passing into green, and think of the season now in its prime and heyday, it looks as if it were the blood mantling in the cheek of the youthful year, - the rosy cheek of its health, its rude June health. (Henry David Thoreau, Journal, June 2, 1854).

Just how prominent Rumex was in the agricultural weed flora becomes evident from Thoreau's description of a New England landscape colored red by flowering sorrel, where he also acknowledges the nuisance it caused the farmers:

"Some fields are now almost wholly covered with sheeps sorrel – now turned red- its valves (?)- It helps thus agreeable to paint the earth – contrasting even at a distance with – the greener fields-blue-skye & dark or dowdy clouds. It is red marbeled watered mottled or waved with greenish – like waving grain 3 or 4 acres of it. To the farmer or grazier it is a troublesome weed- but to the landscape viewer an agreeable red tinge laid on by the painter.

I feel well into the summer when I see this rednes"s (June 11, 1852)

"I see fields a mile distant reddened with sorrel" (June 15, 1852)

"meadows smell sweet at night crickets begin to be numerous, Fields begin to be reddened with sorrel" (June 26, 1852)

For another perspective, that of the agriculturalist.

The exasperated question "What was it made for?" was posed of Rumex in an article in the newspaper "The New England Farmer "in 1869, and continues: "Who can eat it, sleep on it, or use it in any possible way?"

"We think we have seen one hundred acres of it, at least, in some recent travels about the country. On farms called "well managed" it stands in acres together, and has so completely takes possession of the soil as to prevent any other plants from coming into sight."

"We saw a single field where acres were covered with sorrel, and forming seed sufficient we should think, to sow a township of land." (The New England Farmer 1869: 405)

It was recognized that low nutrient levels and poor land management were part of the problem with sorrel infestation:

"Over cropping and shallow ploughing, with exhausting crops in succession, frequently cause overwhelming growths of Sorrel, to infest ill managed fields"

(The American Farmer May 28, 1819 p. 1)

"A sandy field red with sorrel is nature's protest against thew process of exhaustion which has been carried so far that more valuable forage cannot be grown" ("Destroying sorrel" New Hampshire Patriot April 21 1887 p. 1)

Sorrel and dock (*Rumex acetosa*) have a similar appearance and were sometimes not distinguished in the articles and e.g., referred to as "two kinds of sorrel growing on plowed ground (The Farmer's Cabinet Sept 24, 1851, p.1). "Green sorrel" and "red sorrel" (The American Farmer May 28, 1819 p. 1) were used as common names for dock and sorrel. The name sour dock (M.R.M. Williams in Independent Inquirer June 7, 1834, p.4) was also used for Sheep sorrel.