

Lessons from *The Lorax*

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In the late 1960s, Theodore Geisel (Dr. Seuss) fretted that he had read too many dull things on conservation, full of statistics and preachy.¹ He began work on what has become a classic of children's literature and a standard text for Earth Day ceremonies. *The Lorax*, published in 1971, received immediate attention. Its original drawings joined moon rocks as focal points at the opening of the Lyndon B. Johnson Presidential Library. Since that auspicious beginning, *The Lorax* has sold around 600,000 copies. Moreover, it has been adapted to video. A cartoon version, complete with catchy tunes, has far exceeded expectations² of its distributor.

Despite its continuing success, no one teaching about the environment should use this book as a text without some trepidation. It does raise important questions, but it suggests answers that, despite good intentions, are misleading, perhaps dangerously so. The central truth of this wonderfully written story, that no society can prosper by depleting its stock of renewable resources, is undeniable: The difficulties with the story are twofold: It contains internal contradictions and its prescriptions direct attention away from alternatives that can actually achieve the stated goals. The latter failure is due to a common view that people, not incentives, must be changed if we are to avoid the fate depicted in the tale.

Before addressing the content of each of our assertions we review the story and follow up with an interpretation that calls into

¹Quoted in Morgan and Morgan (1995, 209).

²Quoting Scott Martin of 20th Century Fox Video, in personal correspondence. The distributor's policy precludes releasing exact sales figures.

question its internal consistency. Finally we offer a view of how free markets tend to avoid the tragedy depicted (and implicitly laid at the foot of free markets).

Summary: The Lorax - Who he was and why he left

As the story begins a young boy goes to the far end of town to hear the Lorax's story. There a grumpy old man, the Once-ler, living in a run down store, agrees to relate the story, but only if paid fifteen cents. It all began, the Once-ler reports, back when the land was wild and clean. Birds (Swomee-Swans), Bears (Bar-ba-loots), and Humming-fish played. Beautiful Truffula Trees, bearing colorful tufts, grew in profusion. The Once-ler rode into this paradise on a horse-drawn carriage and immediately proceeded to cut down a Truffula Tree and knit its tuft into a Athneed.®

After knitting the first thneed, the Once-ler was accosted by the Lorax, a short, old, Amossy® man-thing. This creature, the Lorax, claimed to speak for the trees, demanding to know AWhat's that THING you've made out of my Truffula tuft?®

Unfortunately for the Lorax and the trees, thneeds sold extremely well. The Once-ler's business grew so fast that he soon called on his family to help. Before long, Once-lers were building factories and cutting down trees as fast as possible, developing a complicated technical apparatus for cutting, assembling, and shipping the ever-popular thneeds.

In the midst of this prosperity, the Lorax reappeared, bringing bad news. The Bar-ba-loots, who eat Truffula fruit, did not have enough trees left. They were being forced to leave. The Once-ler sympathized, if only briefly, but dismisses the Lorax's concern with the refrain, AY business is business! And business must grow Y.®

The business did grow. In doing so, it polluted the air and poisons the water. The Lorax again denounced the Once-ler, but the Once-ler was not contrite: AWell, I have my rights, sir, and I'm telling *you*/I intend to go on doing just what I do!® At precisely the moment the Once-ler offered this defiant retort, the last Truffula Tree falls. The Once-ler is out of business, and the Lorax floated away in disgust.

The story closes with the young boy listening to the Once-ler tell his story. The Once-ler tells the boy that only changed hearts can save the Truffula trees: AUNLESS someone like you/cares a whole awful lot/nothing is going to get better. /It=s not.@ With this entreaty, the Once-ler gives the boy the last remaining Truffula Seed. If he takes care of the seed, then Athe Lorax and all of his friends may come back.@

The book and animated cartoon versions differ in some details. The cartoon version has more comments about pollution, and it presents many more Auses@ for the thneed. Also, the Once-ler even builds roads and apartment complexes on land cleared of trees. Most notably, the Once-ler almost gives in to the Lorax at the end, but is (most improbably) notified by his secretary that the stock price of Thneeds Incorporated has doubled. This news emboldens him to give the defiant speech quoted above.

Could it have happened that way?

The Lorax does not contain the term "the market" but is clearly situated within a framework of (at least implicit) private ownership of resources. The Once-ler does seem to have the prerogatives associated with a system of property rights. He exerts control over the resources. He even invites other Once-lers to help cut and process the trees. No one tries to take the valuable Truffula trees from him. The Lorax does not threaten lawsuit and apparently lacks either the will or the ability to offer physical resistance. Whatever the explicit nature of the Once-ler's ownership claims, we find all the elements of private property: secure ownership, exclusive use, and the ability to transfer ownership (sell Thneeds).

Thus, intentionally or otherwise, Dr. Seuss presents *The Lorax* as a critique of how people behave when left to their own devices, guided only by market forces. Of course, the market forces are missing in the story. Dr. Seuss could not see the Invisible Hand and, therefore, proceeds as if it did not exist. Adding this important detail and then analyzing this fable can provide useful insights into how markets work. The essential details in *The Lorax* are these:

- § The Once-ler comes to the land of Truffula trees, the raw material for Thneeds.
- § The Once-ler builds factories and an extensive network to deliver Thneeds to the market. Can overall operation large enough (in the video version) to trade on stock markets.
- § At least in the video version, the Once-ler has some sympathy for wild things, but greed or the thrill of apparent success overwhelms this sympathy. When he reads that the stock price is up, he kicks out the Lorax. (This detail is not in the book.)
- § The Truffula tree is renewable. (In the video version, Truffulas have a planting cycle of something over twenty years—maybe between the cycle of Southern pine and that of Northwestern fir. Again, this detail is not in the book.)

§ Nevertheless, the Once-ler makes no effort to replant the trees or even to keep any record of the inventory of the number remaining.

Could it happen this way? The answer depends on what Ait@ is. If the poem refers to local depletion of resources, then it could happen. Trees once covered Manhattan. Some might decry the change, but one cannot conclude that market forces have led to a general depletion of the resource base. It probably made sense to clear Manhattan of its forests because those particular forests were not needed as long as similar ones covered much of North America. We interpret *The Lorax* as offering a much more important criticism, that unconstrained greed tends to result in wholesale depletion of valuable natural resources. Indeed, this statement is true, but *The Lorax* fails to see that market forces do constrain self-interested (even greedy) behavior.

This story, as told, is quite implausible. At a minimum, it requires that the Once-ler be either quite stupid or not fully sane. The Once-ler must not care about his own financial well being if he is as secure in his property as he appears to be. One typically acquires wealth by managing a renewable resource rather than by using it up. Ranchers maintain their herds; Georgia Pacific maintains (and expands) its holdings of pine; farmers maintain the fertility of their land (though not necessarily at its original level); and so forth.³ Thus, the Once-ler must be either maniacal or stupid. The quest for profits would lead to replenishing (though not necessarily to original levels), not dissipation.

³ Henry George said, "Both the jayhawk and the man eat chicken. The more hawks, the less chickens but the more men, the more chickens." His reasoning applies to any renewable resource. See Mixon and Patrono (1995).

Stupidity alone is not enough to generate the dissipation reported in this tale. Suppose that the Once-ler were too dense to realize that failing to replenish the stock of Truffula trees means an imminent end of his enterprise. At least two other groups would have incentives to respond to this stupidity. The first is the other clan members. Some must recognize that their security is threatened by wantonly destroying Truffula trees. It would be worth their while to persuade the Once-ler to hand over the reins of the business. Should persuasion fail, a cabal or, less dramatically, a buyout would place control in hands that would increase the value of the Truffula forest. So, unless all Once-lers suffer from the malady of their pioneering cousin, the conclusion of *The Lorax* does not follow from its premises.

Even clan-wide failure to see the obvious is not enough. The second group having an incentive to Astop the madness@ consists of outsiders who see the profits derived from maintaining a continuing supply of Thneeds. These outsiders can offer the Once-ler more than the forest is worth to him, given his mismanagement of the resource. Thus, if the Once-ler is simply stupid and greedy, market forces will rescue the Truffula forest from his designs. Only if he is both maniacal and powerful enough to rebuff any efforts of fellow Once-lers and outsiders with a longer view will he behave as the story claims.⁴

⁴ One other condition must be met for this tale to have its dire implications: The Once-ler must be a monopolist. The Once-ler must be the single owner of Truffula forest, and it must be impossible for anyone else to acquire seeds to plant other such forests.

As noted above, the video version of the story adds the detail that the stock market finances Thneed production. (The rising stock price overcame his sympathy for the critters.) This detail makes the story even less credible as a tale of the effects of greed in a free market economy. The stock market, along with the related bond market, is simply people lending their money to businesses in return for part of the firms' profits, or for interest on bonds. Once Thneed production has gone public many people other than the Once-ler have an interest in the firm's resource management. Highly paid specialists continually examine company books. They would inform their clients of the imminent demise of the Thneed business, for lack of raw materials, as Truffle trees vanished.

This supervision implies that, long before the Once-ler heard the last tree fall, he would have heard the news that his stock price was falling. Other, more sensible, investors would have heard it too, and would have every incentive to mount a hostile takeover in order to save the business from the folly of its founder (a fairly common occurrence).

Evidence supports this view of market behavior. Owners of vineyards routinely make plantings that will yield no revenue for as long as a century. Paper companies, likewise, plant trees to be cut decades later. Indeed, the extent of such planting is such that the stock of timber is greater today than a half-century ago in the United States, even though this country uses wood products faster than at any time in our history.⁵

⁵The quantity of timber is growing even though the U. S. Forest Service often subsidizes the cutting of trees on federal land by building roads to otherwise inaccessible locations and then charging logging firms fees that do not cover construction costs. Even as more than 40 billion board feet of lumber are produced each year, the volume of American forests expands: The volume was 2,520 billion board feet in 1952 and had grown to 2,829 billion board feet in 1987. (Sources: *Statistical Abstract of the United States, 1992* (p. 671) and *Statistical Abstract of the United States, 1995*. (page 695).) During this period, the percentage of timberland ownership that was private rose from 70.0 percent to 71.8 percent (same sources). Furthermore, standing volume per acre is increasing (*Evergreen*, 1994). See, also, Sedjo (1995).

In short, *The Lorax* is a precautionary story that raises important issues. It does not, however, effectively criticize (or successfully characterize) a free market's treatment of renewable resources. Its central point is correct: We humans must not behave as Once-lers. This tale's weakness is that its conclusion (resource depletion) does not follow from its implicit premise (a system of private property and free markets). Quite the contrary is true: A primary virtue of the free market system is that it does focus attention on the future.

Real lessons from *The Lorax*

The preceding section argues that *The Lorax* should not be construed as a pertinent critique of free markets. What, then, is its moral? Some readers have focused narrowly on the cutting of trees. Recently, citizens of a logging town tried to have the book removed from a second-grade-reading list because they believed that it traumatized children whose parents engaged in logging.⁶ The author directly disavowed this interpretation: I'm not saying logging people are bad. I live in a wooden house and sit in a wooden chair.⁷

⁶Aria and McNeil (1989).

⁷Aria and McNeil, 68.

The direct lesson is explicit in the poem: APlant a new Truffula. Treat it with care. Give it clean water. And feed it fresh air.@ These instructions are inadequate, however, because each person can not become a caretaker for each resource. Suppose the boy does just as instructed and does plant the trees. As long as other Once-lers abound, the boy=s vigilance will eventually wane (or he will die), at which time some Once-ler will cut down the trees. Thus, the direct lesson should be interpreted as an instruction to avoid a system of incentives to behave like Once-lers. In a free society, a central aspect of this instruction must be to ensure that property rights are well defined and enforced. Failure to do this produces the ATragedy of the Commons,@ in which each person has every reason to become a Once-ler.⁸

Increasingly, researchers are becoming aware of the importance of incentives. Free-market advocate Richard Stroup writes that a reformed Endangered Species Act should Amake endangered species the friend, not the foe, of landownersY.@⁹ Michael Bean and David Wilcove of the Environmental Defense Fund echo Stroup=s concerns: AThe Achilles heel of the Endangered Species Act is the private ownership problem. More than half of all threatened or endangered species in the United States depend Y on habitat that is privately owned. Y If the goal of averting the loss of biological diversity is to be achieved, it will be essential to have strategies that work well on private land.@¹⁰ Increasingly, both free-market advocates and mainstream environmentalists agree that the current status provides perverse incentives that produce undesirable results and both agree that as long as the incentives remain, so will the results. Members of both groups increasingly agree that institutional changes to improve incentives would ameliorate the situation.

⁸Hardin (1968).

⁹Stroup (1995). Also, Bourland and Stroup (1996).

¹⁰ Bean and Wilcove (1995).

An especially instructive example of the importance of incentives involves African elephants. (Dr. Seuss reports that he had been unable to write *The Lorax* for some time. While on safari in Kenya, he saw some elephants on a hillside and AI wrote ninety percent of the book that afternoon. I got some kind of release watching those elephants.)¹¹ Those elephants, unfortunately, are vanishing because of

¹¹Morgan and Morgan, page 210.

a policy designed to save them. Kenya and Tanzania have banned the hunting of elephants and the export of ivory, rendering the elephant herd of no economic value to those in a position to maintain the herd. As a result, herds have been cut in half.¹² At the same time, Zimbabwe allows hunting and has established rules allowing local citizens to share in the revenues from elephant hunting. As a result, these citizens are willing to accept the disadvantages that come with elephant herds and allow them to flourish. As a result, Zimbabwe's government has recently engaged in selective killing to keep the herds from becoming too large. Zimbabwe's elephant population grew from under 40,000 to over 60,000 elephants while Kenya's population fell from 167,000 to 16,000.¹³

What to do?

An educator interested in teaching about the environment has limited choices. One option is to use books or videos like *The Lorax* and entreat children to "Save the Earth." This approach is inadequate and, ultimately, frustrating. Despite their shortcomings, however, these sources do point to quite real difficulties. Their accounts can be employed as an entering wedge to discuss how the power of the market can be harnessed to effect change of the type that might make the Lorax comfortable once more.

¹²Brookes (1989).

¹³Anderson (1991) and Sugg (1996).

References

Anderson, Terry L. 1995. AZimbabwe Makes Living with Wildlife Pay,= *Wall Street Journal*. October 25, A14.

Aria, Ron and McNeil, Liz. 1989. AA Boy Sides with Dr. Seuss=s *Lorax* and Puts a Town at Loggerheads.@ *People Weekly*, Vol. 32, No. 17. October 23, 67B68.

Bean, Michael J. and Wilcove, David S. 1995. AEnding the Impasse.@ *The Environmental Forum*. July/August, 22.

Bourland, Thomas R. and Stroup, Richard L., 1996. ARent Payments as Incentives.@ *Journal of Forestry*. April, 18 - 21.

Brookes, Stephen. 1989. AMeans of Defense Is Proving to Be Elephant=s Ruin.@ *Insight*. November 13, 34B38.

Evergreen Foundation. 1994. *Evergreen Magazine: 1994 Forest Facts Book*. Medford Oregon: The Evergreen Foundation.

Hardin, Garrett. 1968. AThe Tragedy of the Commons.@ *Science*. Vol. 162, 1243B1248.

Mixon. Jr., J. Wilson and Patrono, Michael F., 1995. AChicken Hawks and Corn Chips.@ *The St. Croix Review*. Vol. 28, No. 2, 44B45.

Morgan, Judith and Neil. 1995. *Dr. Seuss and Mr. Geisel: A Biography* New York: Random House.

Sedjo, Roger A. 1995. AForests: Conflicting Signals.@ Ronald Bailey (ed.). *The Real State of the Planet*. New York: The Free Press.

Stroup, Richard L. 1995. AMaking Endangered Species Friends Instead of Enemies.@ *The American Enterprise*. September/October, 83.

Sugg, Ike C. 1996. ASelling Hunting Rights Saves Animals.@ *Wall Street Journal*. July 23, A22.

U. S. Government Printing Office. 1992. *Statistical Abstract of the United States, 1992*. Washington: U. S. Government Printing Office.

Lessons from the Lorax. Using graphs to study change. by Rob Quaden and Alan Ticotsky. The Lorax, by Dr. Seuss, is a classic children's book that appeals to all ages. Told in a fanciful style, the story relates how an ambitious businessman named the Once-ler exploits all the resources of a small country. Despite the warnings of a character named the Lorax, all the truffula trees are cut down and made into fast-selling products called thneeds. At the end of the story, the Once-ler regrets his actions, but is it too late? With a new movie version having debuted in March, 2012, many students will be revisiting The Lorax, or experiencing it for the first time. The rich lessons in the