Woodland Owners Getting Paid Your Real Worth Through Ecosystem Services

Waterfall at Robinson Forest. Photo courtesy: Jeff Stringer

by Jeff Stringer

H istorically there have only been a few options for obtaining money from continued management of your woodlands. In the not-too-distant past, timber was the only option. Only recently have woodland owners been able to expand income opportunities by growing and selling non-timber products such as mushrooms or by leasing land for hunting. However, times are changing, and options for obtaining revenue from woodlands may be improving through the sale of "ecosystem services."

These opportunities are one of the hottest revenue-generating topics being discussed for woodland owners. There is a significant movement to get woodland owners paid for the good that woodlands provide society through the positive effect that woodlands have on the ecosystem. Efforts are being made to pay owners to keep their woodlands in woods so that society can benefit through the production of clean water, sequestering of carbon to help with global warming, and production and protection of biodiversity. Several ecosystem services are currently being paid for on a trial basis, and further efforts are in the works.

Before getting too excited, realize that everything that follows is in the developmental stage, although some ecosystem markets are more advanced than others. That means if it sounds too good to be true, it probably is. But keeping abreast of this emerging trend means that woodland owners will be in a position to take advantage of these income sources as they become available. While none of them will allow woodland owners to get rich, their sale might be enough to pay property taxes.

Right now there is no unified payment scheme for ecosystem services. Think of each ecosystem service as a separate market. Just as timber is sold to a market that is different from the market for shiitake mushrooms, there is a difference between the markets used to sell carbon credits and clean water. You cannot get paid for all of them in one payment. Currently, a few ecosystem services have emerging markets. The following provides some information on how one of these markets work.

Selling Carbon Credits

Let's assume that you are a woodland owner. As your woodlands grow, it takes carbon dioxide from the atmosphere and turns much of it into wood. The main stem of your trees can be viewed as a storehouse for carbon. The more your trees grow, the more carbon dioxide is taken out of the atmosphere and put into storage. This reduces carbon dioxide, a greenhouse gas thought to be responsible for global warming. This is seen as a service to society. Industries that produce carbon dioxide recognize that your woodlands sequester carbon and will pay you for removing the carbon dioxide that they emit. This helps them with emissions standards, and they are willing to pay for it.



So, how do you get paid for storing carbon?

A brokerage service has been developed to trade in carbon credits through the Chicago Climate Exchange. Industries that emit will buy carbon credits. You have carbon credits to sell because your trees sequester carbon. There is a middleman in all of this, somebody that you enter into an agreement with to store carbon. That entity sells your carbon storage in the form of carbon credits to buyers. You get part of this money, and the middleman gets part of the money. The amount of carbon you can sequester is based on the expanse of your woodlands, how productive it is (i.e., how fast it grows), how much wood you leave standing (for the purpose of sequestering carbon), and what you have done to increase woodland growth. There is a formula and a standard way to determine all of this. The middleman ensures that you have your woodlands inventoried (by a consulting forester) for the amount of wood in it (translated as carbon you have stored). You also have an agreement with the middleman that you will not remove this carbon (translated as wood). The middleman then sells your carbon credits to the exchange, and you get the money.

Kentucky is among the first states where this is being done, albeit on a small scale. The Mountain Association for Community Economic Development (MACED), a nonprofit organization based in Berea, Kentucky, is gathering landowners for a three-year deal. Each landowner will gross about \$5 to \$7 per acre per year in the deal if the demand for carbon credits stays relatively stable over the three-year period. You deduct the cost of inventorying and tracking the amount of woody biomass, and you will wind up making about half of the gross. If you cut your trees or if a storm knocks them down, you have to adjust inventory, and you will receive less money.

Carbon sequestration is but one example of an ecosystem service that woodland owners can capitalize on. It is the most advanced market to date. Other markets are developing for creating and protecting stream habitat and water quality through the maintenance of riparian buffers around streams. Potentially, there are a host of other ecosystem services that woodland owners could be benefiting from.

Stayed tuned for further details on ecosystem services and the particulars of MACED's carbon credits project.

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