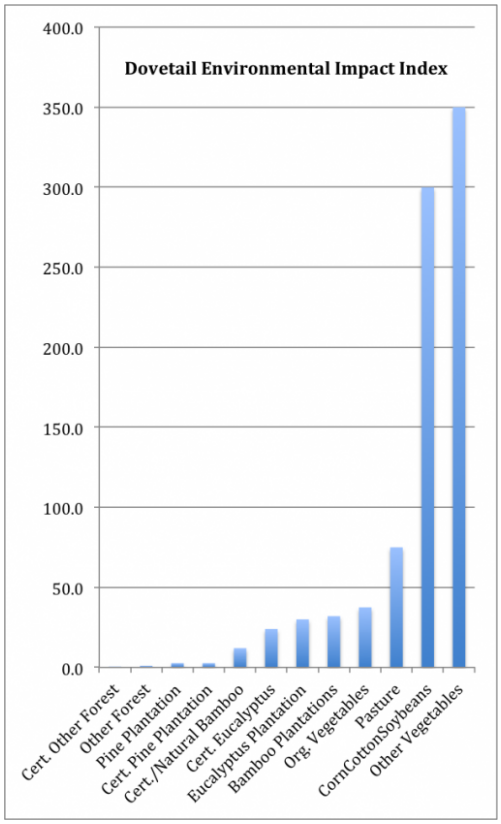
Forest or Farm? It's All in the Perspective.

For the last ten-fifteen years "rapidly renewable" materials were promoted by most green building programs as being preferable to most other extracted materials. It is only recently, in the past couple of years actually, that they have come to recognize some of the challenges and environmental impacts associated with that broad-brush approach. However, this initial recognition hasn't yet brought widespread clarity to material selection and preferences.

What is clear is that all renewable materials are not created equal environmentally, and that the devil's in the details when analyzing material choices, renewable or not. For that reason we at Dovetail sought a way to look at this issue that might help clarify at least the scale of concerns related to various renewable materials. The adjacent chart is one approach in an attempt to illustrate the relative environmental impacts of a number of major natural materials over a 100-year period. [1]

The key to the Dovetail Environmental Impact Index is that it is relational, not data driven. Its purpose is only to denote relative scale of impacts, not actual impact. It is certainly imperfect, but it does paint an interesting picture. This index simply compares various "ecosystems" based upon the relative use of herbicides, pesticides, fertilizer, irrigation, harvest cycles and their associated soil erosion.



What you can quickly see is that the relative impacts of materials from forest ecosystems, regardless of forest management type are significantly lower in relation to those of materials derived from man-

made agricultural ecosystems. Materials from diverse natural forests (or similar) have the least environmental impact and those from intensive conventional agriculture have the most. Not surprisingly, the impacts of materials such as those from forest plantations and bamboo (discussed in greater detail in Dovetail's March 2014 report) fall somewhere in the middle.

This is NOT to suggest that the management of forests has no impact. All it is suggesting is that those impacts are, as the accountants like to say, "de minimus"[2] as compared to the impacts of agriculture, and especially the dominant forms of annual cropping systems. It is also valuable to point out, that at this scale the relative effect of certification, in forest or agriculture is only of value when comparing within that base natural system. That is, if you are choosing between noncertified and certified agricultural products or between noncertified and certified forest products, certification may have an impact; but not when choosing between forest and farm.

There is an old saying, "Can't see the forest for the trees." To a certain extent whenever we get caught up fighting about the details of a particular product or material, we lose sight of the big picture. The Environmental Impact Index reminds us that there is an important scale to the issues we are discussing, that we always need to keep in mind. So, whenever an alternate material suggests, "save a tree, use… X" we can't let the loss of that tree blind us to the benefits of the forest that it comes from.

Dr. Jeff Howe

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[1] All this chart does is compare ecosystems by estimated use of herbicides, pesticides, fertilizer, irrigation, associated erosion and the number of times these things are likely to occur over a 100 year period; the higher the index the higher the impact.

[2] Lacking in significance or importance – Merriam Webster.