



If You Want to Save the Planet, Don't Plant Trees

BioUpdate Foundation

I am sure you have received an email, with a little post script at the bottom saying something like “Consider the environment before printing this email”. Although made from trees, paper is not made from tropical hardwoods, so not printing emails will not save the rainforest, but it struck me that if you want to encourage the planting of trees, then increasing the consumption of paper might help. Hence my own emails used to carry the post-script “Have you ever considered that printing this email may encourage the planting of more trees”.

The rain forest has been disappearing at an alarming rate, hence it seems logical, if you want to save the planet, plant more trees. Life it turns out is not that simple!

I was recently reading an open access article on landscape ecology. Not that landscape ecology is an abiding interest of mine. The closest encounter I ever had with the subject was as a student on a Botany Department field trip to the Pennine Hills in the North of England. I was standing next to David Bellamy who thrust a handful of grass into my mouth and said “Chew that”. This was a typical Bellamy experiment, a couple of years later I also sampled a 3000 year old peat boring under similar circumstances. Getting back to the grass, it was full of hard, coarse seeds and seed coats, and my mouth was felt like it was full of grit. When asked what it was like, I relayed this information, “Yes”, Bellamy replied, “Sheep won't eat this”. Thereby I learned two things, one was the only latin name of a grass I have ever remembered (*Narda stricta*) and the second was why the expanse of apparently unlimited, free grazing land was devoid of sheep.

The reason I was reading the landscape ecology article was that it had recently been featured on Swedish television news, and one of the authors is my son. The bottom of [the article](#) is the loss of 96% of semi-natural grassland, in at least one part of Sweden, mostly to forest. This it turns out is not a good thing. Managed forests host a low species diversity compared to other habitats (Hartley, M.J. 2002. Forest Ecology and Management 155: 81–95. doi:10.1016/S0378-1127(01)00549-7). This should not be a surprising fact to any-one who has walked in a managed coniferous forest. The trees are closely planted, little light filters through and the forest floor is covered with a layer of dry brown, slowly decaying dead needles or scale-like leaves. Little else grows between the trees.

In brief, the more managed forests we plant, the more plant species we will lose. So encouraging the planting of more trees, by fuelling the demand for paper is going to harm the environment. What should we do? Since arable crops also tend to be grown at high density, then only the field margins are available for biodiversity, but large fields with fewer margins, and certainly fewer hedgerows, are economically more attractive. So more crops is not the answer. Should we return to more open grazed grassland. More cows and pigs? Well that comes with its own problem – dung! Apart from the more obvious drawbacks of large amount of dung, it too can have a severe impact on the environment. Pigs are notorious for producing phosphate rich dung, which when it leaches

into the waterways, leads to severe eutrophication and to prolific, potentially toxic, algal growth.

Tony Auffret
March 2015