

Dear Sir/Madam,

I am proposing an extension of the current Human-Induced Regeneration (of a Permanent Even-Aged Native Forest -1.1, HIR) Methodology (Authorised Version F2018C00125). I suggest the eligible land under this methodology being expanded to include land that already has a forest cover defined within the Methodology.

My proposal is based on the fact that scientific research has demonstrated that elder and/or thicker trees grow faster, and therefore sequester more carbon dioxide, irrespective of tree species, geographical, and climate conditions (Stephenson et al., 2014, Nature). Please also refer to a book excerpt below for the research outcome. The company I currently work for manages an aggregation of pastoral stations over 10,000 km<sup>2</sup> in the Goldfields district in Western Australia, and has been considering a carbon project via the HIR method. Several field trips regarding to classification and verification of eligible and non-eligible lands (pre-determined via satellite images provided by associated government agencies) within the pastoral leases have been conducted internally. My observation tends to support that trees (mostly mulga, Acacia Aneura and gum trees, Eucalyptus) situated within areas which have qualified forest cover are elder and also thicker in size. Hence, I propose to expand the eligible land, in order to fully appreciate and then measure the carbon sequestration capability of the lands within the HIR methodology. Further, the expanded HIR methodology proposed here is also going to be in line with people's (pastoralists' and various share holders') intuition, as it is a widely-held view that thicker bush/trees could capture more carbon dioxide.

*Excerpt from 'The Hidden Life of Trees- What They Feel, How They Communicate - Discoveries from a Secret World, from Chapter 16 - Carbon dioxide vacuums'*

".....suggested by a study undertaken by an international team of scientists. The researchers looked at about 700,000 trees on every continent around the world. The surprising result is that the older the tree, the more quickly it grows. Trees with trunks three feet in diameter generated three times as much biomass as trees that were only half as wide. So in the case of trees, being old doesn't mean being weak, bowed and fragile. Quite the opposite it means being full of energy and highly productive. This means elders are markedly more productive than young whippersnappers, and when it comes to climate change, they are important allies for human beings. Since the publication of this study, the exhortation to rejuvenate forests to revitalize them should at the very least be flagged as misleading. The most that can be said is that as far as marketable lumber is concerned, trees become less valuable after a certain age. In older trees, fungi can lead to rot inside the trunk, but this doesn't slow future growth one little bit. If we want to use forests as a weapon in the fight against climate change, then we must allow them to grow old....."

#### **Reference**

Stephenson, Nathan L., et al. "Rate of tree carbon accumulation increases continuously with tree size." *Nature* 507.7490 (2014): 90. <https://www.nature.com/articles/nature12914>

Thanks.

Kind regards,  
Mark Huang