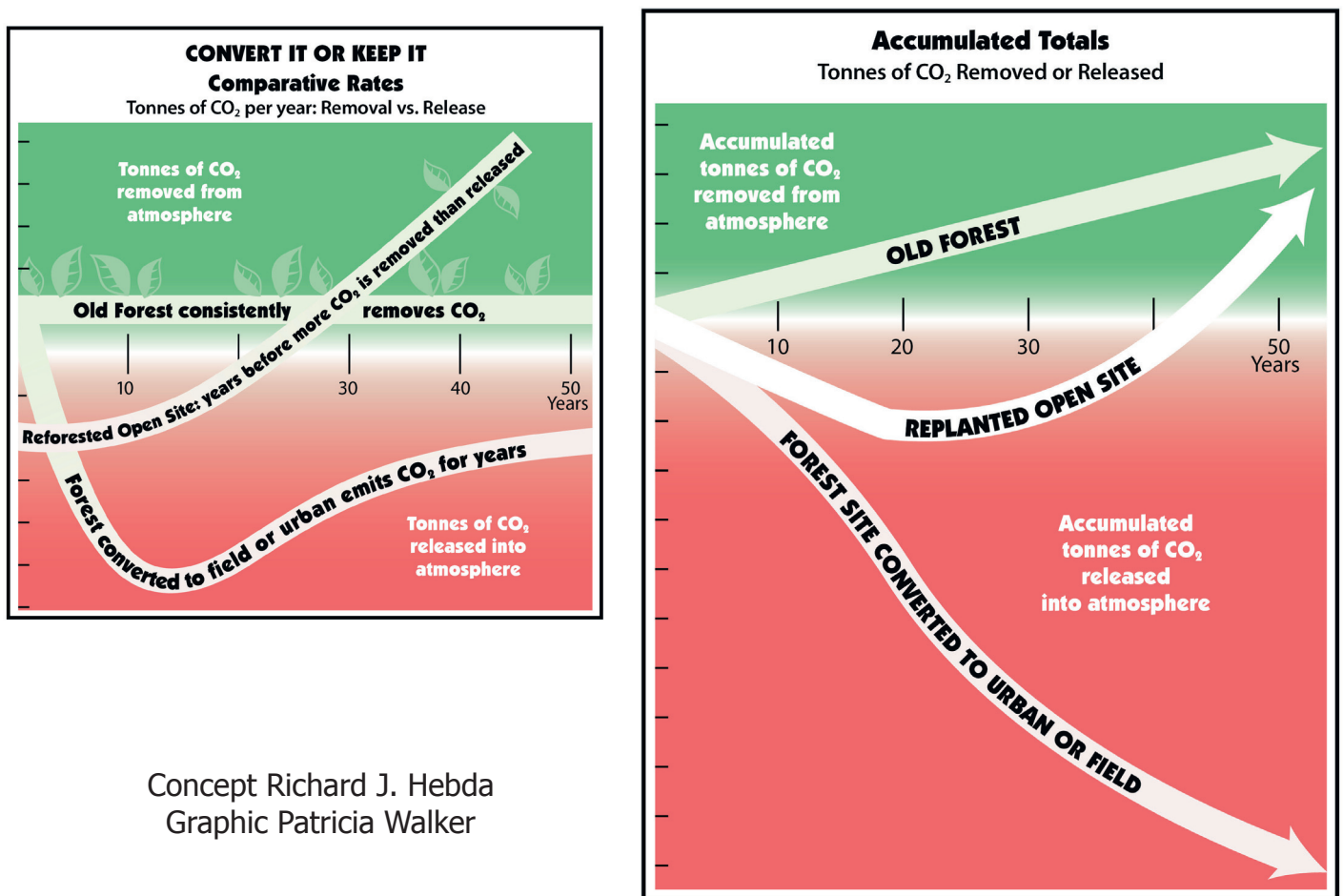


# MITIGATING AND ADAPTING TO CLIMATE CHANGE THROUGH THE CONSERVATION OF NATURE

Report released January 2008 by The Land Trust Alliance of British Columbia

[www.landtrustalliance.bc.ca](http://www.landtrustalliance.bc.ca) 250-538-0112

Figure 2: Old Forest Carbon Storage versus Reforestation and Conversion Impacts on Carbon Storage



Concept Richard J. Hebda  
Graphic Patricia Walker

Oceans and terrestrial ecosystems remove about 50 to 60 percent of human-caused greenhouse gas emissions (fossil fuel and land use emissions), and curb more intense global climate change. The consequences of land use and thus mitigation choices are most obvious when looking at the accumulated CO<sub>2</sub> effects in the atmosphere. By the end of 50 years, a converted BC coast forest may have released hundreds of tonnes per hectare of carbon as CO<sub>2</sub> into the atmosphere and contributed to climate change. An equivalent area of replanted forest will not have had any positive effect on atmospheric CO<sub>2</sub> for decades. Depending on the specific conditions, the replanting strategy may not even have caught up to the steadily accumulating benefits of removed CO<sub>2</sub> by a conserved old forest for half a century. Like the proverbial turtle, the slow and steady CO<sub>2</sub> removal benefits of a conserved old forest end up ahead even of a replanted stand in the short and medium term., from the report by Sara J. Wilson and Richard J. Hebda