

April 1, 2005

TO: Tom Spies
RE: Old Growth Workshop—Statement of My Perspectives
FROM: Barry R. Noon

1) My views on old-growth forests: I believe far too much time has been devoted to debates in search of a “correct” definition of old-growth forests. Like so many elements of ecological systems, forests exist along a continuous temporal gradient. Changes in structure and composition of vegetation communities are often gradual, not episodic. It is perhaps impossible to identify discrete break points that will unambiguously discriminate old-growth from other forest types. The most direct approach, in my mind, is to start with some minimum age range and couple that with operational characterization of structure and composition that are described as frequency distributions and not threshold values.

I assign great value to old-growth forests because of their unique contribution to the conservation of biological diversity. Many currently imperiled species are largely restricted to habitat in old-growth or late seral forests. These forests serve as refuges for many species and are a necessary source of colonists when other areas of the landscape recover from disturbance or are actively restored. In order to sustain these species, existing old-growth needs to be retained and efforts should be made to restore and accelerate successional processes.

Key elements, often restricted to old-growth forests, are currently limiting many species and ecological processes. The most obvious of these is the keystone role played by large trees, either standing alive, standing dead, or on the ground. These roles include habitat for wildlife, structure for aquatic ecosystems, substrates for other species, creation of novel micro-habitats and environments, carbon sequestration, and climate amelioration and control.

2) The nature of the problem: The fundamental nature of the problem, and why old-growth ecosystems are so at risk, is that the public does not understand their role in the provisioning of essential environmental goods and services. These outputs, for the most part, are not traded in traditional markets and their values are easily overlooked. Traditional market perspectives focus on the value of old-growth trees when they become outputs from the lumber mill. There are, of course, significant existence values that people assign to old-growth as well. Again, these are not traditional market goods and often do not enter into conventional cost-benefit analyses.

3) Efforts needed to solve the problem: Foremost, the public needs to be informed of the role of old forests in providing essential outputs that have value to them. They also need to be educated to the fact that these forests are at risk and, once gone, are effectively irreplaceable over meaningful human time frames. There are significant educational and research roles to be played here by ecologists, social scientists, and economists. For example, economists can focus on estimating the non-market values of old-growth forests and the lack of feasible substitutes for old forest outputs. Social scientists can focus on the existence value and emotional refuge provided by these forests and how they contribute to “quality of life”. Ecologists can focus their

research on better documentation and measurement of ecological outputs essential to long-term human well being.