PRESERVATION ECONOMICS

Just as human environmental awareness is fast evolving, so too now must economics. As far as pristine areas are concerned, they are too important to long term ecological sustainability to be treated as non-economic externalities. Economic assessment must evolve to incorporate preservation values. Studies have been initiated in the United States to the methodology for quantifying preservation values.¹⁹ By this approach, three types of economic preservation values have been recognized:

- Existence Value is the worth ascribed to protected areas by individuals in knowing that these wild spaces and their ecosystems remain intact.
- Option Value is the worth derived from knowing the option endures for individuals to visit a protected area and experience it in it natural state at some possible future time.
- **Bequest Value** is the worth associated with being able to hand on intact areas of the original Earth to future generations.

There is no question that economic preservation values are real. For example, when the governments of Canada and British Columbia chose to forego logging in South Moresby, they were demonstrating an economic preservation value for the area.

Studies undertaken for several wilderness and protected wild river systems in various U.S. states have consistently shown that societal preservation values for pristine areas can be large: In 1985 the annual preservation value for protected wild river areas in Colorado was calculated to be \$91.3 million.²⁰ Typically preservation values exceed recreational use values of a protected area (tourism and non-commercial combined) by 4-5 times. What this means is that the prime value of preserving a natural area is in its intrinsic option, existence and bequest values, rather than its actual use. This only confirms what we intuitively know: that representative samples of Nature must be retained intact.

However, simply calculating today's economic preservation value of protected sites is not enough. This is because, with each day, the chance to protect intact samples of the natural environment diminish. Therefore, by the basic law of economics, as the supply of wild areas drops, the value of preserved sites increases.

Accordingly, the economics of protecting irreplaceable intact natural areas today must be valued in terms of the future worth of such reserves to society. For example, what will the value to humanity of a biodiversity reserve such as the old growth forests of Clayoquot Sound or the wildlife populations of