basic necessities of people especially in Third World countries for wood for construction, heating, and cooking. The latter two necessities, alone, consume one half of the wood used in the world annually. The prospect of serious problems in supplying wood for fuel in a number of countries should be cause for professional concern everywhere. Disturbing evidence is provided of progressive deforestation in India, Africa, and South East Asia, through the spread of agriculture, especially grazing, and through indiscriminate firewood collecting at rates exceeding forest growth. The ruthless highgrading of tropical forests, and improper logging practices are causing the degradation and destruction of extensive forest areas each year.

The best available inventory data indicate that 25 per cent of world land area was under forest in 1950. By 1970 the forested area had been reduced to 20 per cent; and the writer concludes from this survey that forests are disappearing at the rate of more than 10 million hectares per annum.

The dimension of the firewood supply problem has been examined by the World Bank. By the year 2000, 20 to 25 million hectares of new plantations would have to be in place to meet the demand for firewood. Yet "At the current rate of planting for this purpose, only about two million hectares, one tenth of what is needed, will be established."

Eckholm suggests that the answer to local timber needs will not be found in largescale plantations planned from above, as is usually undertaken by foresters. These fail to benefit the people. Rather, participation in establishing forests through "community forestry", is urged. Such an approach stands in sharp contrast to the approach taken in the development of the much touted plantations in Brazil. That country has heavily subsidized commercial plantations by large land owners and corporations. As the author reports, "Since 1967, three million hectares of plantations, mostly fast-growing eucalypts and pines destined for pulp mills, have been established. A valuable resource has been created but at an extraordinary price: tax subsidies have averaged five hundred dollars to eight hundred and twenty dollars a hectare with the public subsidy over eleven years totalling one point eight billion dollars." This program has involved one of the highest costs in the world of creating man made forests.

In contrast to the above-mentioned approach, the successes achieved by Korea and China in community forestry are described.

"The challenge facing world forestry is not just to halt deforestation and to plant enough trees to satisfy commercial and environmental needs. From a social perspective, top priority must also be given to meeting the elementary forest and wood needs of the poorest one-third of humanity." Eckholm suggests that foresters are accustomed to running things from above, and he observes that there is a need for reform in the structure of the forestry profession to enable it to work with and through people rather than simply preaching at them.

This survey of world forestry trends and problems provides an excellent

perspecgive and is well worth the several hours reading time.

K.W. Hearnden, R.P.F. Lakehead University Thunder Bay, Ontario

Our National Landscape: Proceeding of a Conference on Applied Techniques for Analysis and Management of the Visual Resource. G.H. Elsner and R.C. Smardon (Tech. Co-ords.), USDA, Forest Service, Gen. Tech. Rep. PSW-35, 752p., 1980. (Single copies free, while supplies last, from: Publications Distribution Unit-LTR, Pacific Southwest Forest and Range Experiment Station, P.O. Box 245, Berkeley, Calif., USA. 94701.)

What is a visual or scenic resource? Who decides that a location has a scenic quality, and on what basis? Of what value is a particular scenic resource? If an area is thought worthy of protection, what is the best way of accomplishing this? Will the beauty of a scenic resource be harmed by additions or modifications? Is it possible or even desirable to limit our appreciation of visual resources to a series of vista points, from which the public could enjoy fixed, limited scenes and ignore all those parts of the landscape that are not readily visible from those points? Do we need to worry about scenic resources in areas not accessible to the public?

To gain a perspective on a concept of scenic resources, we must discard the idea that a scenic resource is merely a series of views. The entire landscape is a scenic resource with its sights, shapes and proportions, smells, and sounds. It is not some arbitrarily predigested, preselected or prearranged view. Essential understanding is that a scene is something we are part of and to which we relate as participants in the events, not as spectators. We live in it and it determines who we are and what we will become. A changing landscape is an expression of our values. When we endanger it, we endanger ourselves. If we accept this definition of scenic resources as the landscape we live in, the need to protect and preserve that resource becomes central to our lives.

Many functional demands are placed on the landscape. It has to accommodate houses, stores, places of employment, instruction, and amusement, and an easy way of getting from one to the other. We require clean air and water. We also look to the landscape to supply an added aesthetic dimension, to enrich human experience. But this aesthetic dimensions varies with each of us. Rather than attempting to qualify scenic values in some subjective abstract ways, we should seek specific guiding principles in an effort to find ways to protect and manage the national scenic resources.

How can we decide that something does or does not fit into the landscape? Can we declare with certainty that a specific change in the landscape would impair its value as a scenic resource? There are no quantitative criteria, only qualitative measures requiring judgement and experience. The best landscapes may be totally wild or completely man-made. There

are no rules. The very notion of scenery is cultural and temporal.

How can we protect the heritage of the past, or the present quality, while permitting the necessary adaptations? Changes and man-made structures are not neccessarily polluters of our scenic environment. Every addition to the natural landscape is not necessarily a misfit. The essential question about any project is where it will be located and how it will blend into its surroundings. Every project has to be considered in relation to a specific place, recognizing that some landscapes are more resilient and more capable of absorbing man-made forms than other landscapes.

Our National Landscape deals with the scenic resources and their management and preservation in the context of our present knowldege and our changing values. It is a collection of 104 papers, reprensenting a great variety of viewpoints and approaches. For easy orientation, it is divided in three main sections and 19 subsections:

- "Challenges in Landscape Planning: Simulated Field Trips" deal with visual impact of natural and altered landscapes.
- "Technology Available to Solve Landscape Problems" uses descriptive approaches, as well as quantitative methods, including the use of computers and psychometric and social methods. The reliability of each approach is tested.
- "Solutions to Landscape Management Problems" deals with mining and reclamation, urbanization, highways, recreation and recreational development, rural and agricultural development, utility corridors and power plants, timber management practices, air quality, water resources and energy developments. Several papers deal with the visual impact of continental shelf petroleum and gas related industries. Legal, policy, and political tools available for use in solving landscape management problems are discussed. Litigations and court decisions are described.

The authors include landscape architects, environmental and recreational planners, teachers, recreationalists, industrialists, land and resource managers and environmental consultants, to name a few. If a problem arises dealing with the management of a scenic resource, there is a good chance that this book contains an article suggesting a solution. The concepts of the past and present are critically evaluated and probable future trends are assessed.

Most papers are interesting. Some, however, as can be expected from such a wide range of participants, are very technical and hard to follow. A few seem to be off on a tangent. Generally, the book should be of interest to everybody involved in management of visual resources of a landscape.

Slavoy Eis Pacific Forest Research Centre