THE SOCIAL RENEWABILITY OF FORESTRY'

Harold R. Walt'

Forest Industry Lecturer

Forestry Program
Faculty of Agriculture and Forestry
The University of Alberta
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FOREST INDUSTRY LECTURE SERIES NO.20

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March 30, 1988
Chairman, California State Board of Forestry, Sacramento,
California
Forest industry in western Canada is cooperating with Alberta Forestry, Lands and Wildlife to provide funds to enrich the Forestry Program of the Faculty of Agriculture and Forestry at the University of Alberta through sponsorship of noteworthy speakers.

The Forest Industry Lecture Series was started during the 1976-77 term as a seminar course. The late Desmond I. Crossley and Maxwell T. MacLaggan presented the first series of lectures. The contribution of these two noted Canadian foresters is greatly appreciated.

Subsequent speakers in the series have visited for periods of up to a week, with all visits highlighted by a major public address. It has indeed been a pleasure to host such individuals as C. Ross Silversides, W. Gerald Burch, Gustaf Siren, Kenneth F.S. King, F.L.C. Reed, Gene Namkoong, Kenneth A. Armson, John J. Munro, Peder Braathe, Vidar J. Nordin, Juhani Paivanen, Conor Boyd, John A. Marlow, Gordon Gullion, Hugo Von Sydow, and Mary Jo Lavin. The subjects of their talks are listed at the end of this paper.

This paper contains Harold R. Walt's major public address given on 30 March 1988.
We would like to take this opportunity to express our thanks again to the sponsors of this 1987-88 program — we appreciate very much their willing and sustained support:

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Mr. Harold R. Walt graduated in forestry with honours from the University of California, Berkeley, in 1948. His subsequent career took him to the presidency of William L. Pereira Associates, an international firm of planners, architects and engineers, based in Los Angeles.

After leaving this business in 1974, Mr. Walt joined the University of San Francisco as Dean of the McLaren College of Business Administration, where he still carries a full teaching load as Professor of Management. He has also specialized in mortgage finance, serving as a Director of the Federal Home Loan Bank of San Francisco and a later Visiting Scholar at that same institution, Chairman of the Board of Fidelity Savings and Loan Association of San Francisco, and a member of the Advisory Board for the Federal Home Loan Mortgage
Mr. Walt is currently Chairman of the State Board of Forestry for the State of California. In that capacity he organized and presided over a landmark conference entitled "Forerunners of Forestry's Future," held on the occasion of its Centennial Anniversary in 1985. The program focussed on trends in forestry and led to development of a general vision of forestry in California. A keynote speaker at the workshop was Dr. Willis Harman, head of the Future's Research Group at Stanford Research Institute, with other speakers and participants drawn from a wide range of public, private sector and non-government organizations. A four-part vision was described as a result.

For this and other achievements, Mr. Walt was designated California's "Forester of the Year" for 1986 by the California Association of Resource Conservation Districts.
ACKNOWLEDGEMENTS

Many professional colleagues were helpful in assembling and analyzing information presented here, and I should particularly like to thank Ward Armstrong, Roger R. Bay, John Benneth, Stewart Bledsoe, James B. Corlett, Dean A. Cromwell, Robert Ewing, Louise Fortmann, Peter J. Murphy, Zane G. Smith, Jr., and Henry J. Vaux. I would be remiss also in not expressing gratitude to Judy Jacobs of the University of Alberta for her most skillful job in transcribing and producing my manuscript.
INTRODUCTION

Thank you, Dean Peter Murphy, and thank you Professor James Beck for such a gracious and generous introduction. It has not always been thus. Once, for example, it went like this: "As some of you may know, for many years Professor Walt was in a disturbed and highly emotional state - California." Or on another occasion my host told the audience: "I am particularly pleased to introduce our speaker this evening because he has to catch a plane in twenty-five minutes."

Seriously, we are so pleased to be here with you in this beautiful "Wild Rose" country. Thank you for inviting us. You Canadians should be very proud of such an excellent job with the Olympics! For over two weeks in February the Province of Alberta literally played host to the world. Somehow you opened your arms and hearts to more than 1,800 athletes, 2,800 media, and 150,000 visitors to awesome Alberta. And you handled their impossible demands with the grace and class that has always been associated with Canadian hospitality. As an admiring neighbor I can only say "thank you!"

From an American perspective, of course, the Winter Games are mercifully behind us. At least we didn't have to worry about our returning team making it through the metal detectors at the airport. Yes, we will have to make some changes in the future. The famous tribute to American leadership, for example, will henceforth go something like this: "First in peace, first in war, twenty-second in the Men's Luge." And I think there may even be a solution for our ice hockey team. Four years from now I am going to suggest to the U.S. Olympic Committee that some of our presidential candidates be given a try-out as goalies. That way they can prove to the entire country whether or not they can really walk on water. Thank you. Now let me get into the lighter part of my lecture.

CHANGE IN FORESTRY

My address today, "The Social Renewability of Forestry," expands on a theme introduced several years ago by a distinguished American forester, William A. Duerr. Writing in the Journal of Forestry, Professor Duerr argued that the

3William A. Duerr, "Forestry's Upheaval: Are advances in Western
Teutonic traditions of North American forestry must be re-examined in terms of necessary 20th Century endorsement by society. We foresters long have referred proudly, if not complacently, to timber as our only renewable natural resource - at least in the biological sense. But with present day affluence, mobility, and leisure time, the forest no longer is primarily a source of wood. In fact, people at large, society - not just foresters or commodity executives - increasingly will determine the extent of its renewability. Or harvesting, preservation, protection, and utilization for that matter. In other words, as I initiated a similar public lecture at Berkeley some 16 months ago:

"The objective herein is to offer a plausible argument that the future of forestry in California will be whatever the public-at-large wants it to be. Not what industry leaders think it should be. And not what the profession hopes it will be. Whether we have boundary-to-boundary concrete covering tomorrow's California, or extensive common ownership of public parklands, or well managed open spaces of forest and range, shared both pleasurably and profitably by rural owners and urban visitors, depends, I think, on how creditably foresters and industry executives can project a favorable image of their resource stewardship." 

I am not here as a prophet. Or even as an "expert" only because I am a long way from home. Nor, of course, am I clairvoyant. But I am emboldened to suggest that the recent and sometimes painful experience of forest policy development in California, Oregon, and Washington might be of some utility in your long-term planning. This is not to suggest, of course, that I am preaching revelation. The sophistication, long-term vision, and general professionalism of Canadian forestry has long been known to me. For example, writing some 16 years ago, the University of Montreal sociologist Jacques D. Paris, warns the Canadian forest products industry of emerging "Citification...the reverse migration of ideas, values, attitudes, and ways of life of the city to the country..." Built-in conflict arises from the transplanted urbanite's poor perception of the production cycle generally, and of the

3(cont'd) civilization redefining the profession?" Journal of Forestry (84:1, January 1986, p. 20 et seq.).
transformation of natural resources particularly. It's hard for such a person to understand that 2,600 trees are required for the printing of a local daily. Hence:

"I wonder first whether the industry ought not to give society more and better information on its own nature by pointing to its economic role, the nature of the whole production process, its reliance on and needs of natural resources, the constraints of geographical localization, the true ecology of forest resources and the management techniques necessary to maintain these resources. This documentation should aim at putting the citizens in touch with a major economic agent that they tend to neglect and relegate to inaccessible or uninteresting regions."6

And only during my present visit to Edmonton, I learned over luncheon with forester C.H. Geale the high priority the Alberta Department of Forestry, Lands and Wildlife has placed on its well-considered program of "public awareness." That I might be on the right track is suggested by the reaction of some leading preservationists who finally came to realize that they want timber to remain a strong industry in Washington State, because what replaces logging often isn't environmentally better. Said one such advocate, "I do not want this state to become a wet southern California with suburban sprawl all over the place."

**CHANGE IN BUSINESS**

My theme today is change. It is all around us. Not just in forestry, but in business generally. Everywhere. As a professor of management, I may have been culpable of forcing two undergirding but outmoded concepts on generations of MBA candidates: (a) "Management's primary goal is to maximize the wealth of its stockholders." And (b), "The value of an asset is the present value of a future stream of income."8 As applied to the American forest products industry today, the first of these two themes seems to me clearly inappropriate, simplistic, and short

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1Jacques D. Paris, Ibid., p. 44.
term. It reflects, I think, the quarterly profits fixation that unfortunately has replaced long-term investment in the United States. And the second theme has raised in my mind the current under-valuation of California forestlands, and the deplorable surge of highly leveraged buy-outs that has crystallized public opinion against the forest products industry in my state.'

Tom Peters, author of the widely read In Search of Excellence, starts off his newest book with a categoric statement: "There are no excellent companies." And for the next 560 pages he explains why not. It's a long-needed kick in the pants for American business. The company's rank in the Fortune 500, a recognition based solely on size, will be only of limited importance in judging tomorrow's performance. Instead, he argues, the "excellent" firms of tomorrow will deal proactively with chaos, will cherish impermanence, and will see inevitable change as a source of market advantage. The winners will be "...the specialist producer of high value-added goods or services, or niche creator (emphasis added), which is either a stand-alone firm or a downsized, more entrepreneurial unit of a big firm.' Is there a possible message here for the forestry profession or industry to ponder? Mr. Peters' prescription for the needed management revolution ("The time for 10 percent staff cuts and 20 percent quality improvements is past. Such changes are not good enough.") turns around four implications for public policy:

1. Promote more, not less competition;
2. Retool and involve the work force;
3. Stop the mindless offshore job drift;
4. Push internationalism;
5. Support expanded research and development.

For example, reference is invited to Jack Epstein's "Raiding the Redwoods: How junk bonds are carving up one of our last timber empires," California Business, September 1987, pp. 34-45.

11Peters, Ibid., p. 23.
12Peters, Ibid., Preface xi-xii.
13Peters, Ibid., pp. 32-34.
CHANGE IN MARKETING

Perhaps nowhere are these themes - change and chaos, small company leadership, and special market niches - more apparent than what we are seeing in the new flood of American products being shipped abroad. And, as pointed out in a recent "Cover Story" of Business Week, exports are no longer limited to 747s, wheat and computers. But are our forest product industries participating to their capacities in this new overseas opportunity? I think the answer is clearly "no." Let's face it, from a Pacific Coast perspective at least, new overseas markets for our forest products are needed if the industry is to recover fully from its 1979 crash. There are some who rationalize that the export boom is a creation of the 50 percent drop in the dollar's value over the past three years. But the fact is that the export-import balance in the United States, currently a dreadful annual deficit of around $170 billion, has improved by 14 percent over the past 12 months. One New York economist, Edward S. Hyman, is quoted as predicting that "By the end of this year, the deficit will be under $100 billion. I think we'll have a surplus by 1991 or 1992." Continuation of these trends will require a new approach to foreign marketing. In my view, overseas shipments of West Coast forest products are overly weighted by raw logs instead of value-added merchandise. Log exports as recorded by our three customs districts - Seattle, Columbia, and San Francisco - show a whopping increase of 55 percent between 1976 and 1987. The value of finished lumber shipped during the same period also increased somewhat, but was less than half the market value of logs. Our technology should be better employed and marketing efforts better organized for more profitable overseas business. Small companies, those with annual sales under $400 million, are now leading the parade, are showing more flexibility, and are better adapting to their customers' needs. By customizing its products, one Oregon manufacturer is now selling 70 percent of its lumber to Japanese markets. For example, it switched scales to metric size and has mastered Japan's complicated lumber grading system. This small company has found its niche.

But in the Pacific Coast global marketing effort, as in many other aspects of forestry, I believe Weyerhaeuser is still the industrial leader.\[16\]

\[15\]Business Week, Ibid., p. 60.
\[16\]Herbert F. McLean, "Climbing Out: The Northwest Forest Industry
"The firm, already supplying one-third of Japan's linerboard needs out of its Springville, Oregon, mill, is involved in a joint venture with the Japanese in a Longview, Washington, newsprint mill. There it is meeting the needs of a Japanese newspaper that prints 13 million copies daily - the largest circulation in the world. Completed in 1980 during the big slump, the operation has become the premium quality newsprint mill on the West Coast."

Other positive examples of aggressive coping with change suggest that our forest products industry may now be starting a restructuring mode.

**CHANGE IN FEDERAL FOREST POLICY**

Professor Duerr's description is still apt: forestry across the United States is in an "upheaval." Some contend that the decade of the 1970s, brought dramatically to the American conscience and body politic by the tumultuous observance of Earth Day on April 22, 1970, was the period of greatest change and turmoil. Admittedly, in a relatively short span of time we saw the forestry laws of the United States almost completely revised. And, granted, post-1970 actions by Congress effectively re-wrote the statutory authority for the U.S. Forest Service. Prior to this time, "Management of the national forests was largely custodial, watching and protecting rather than participating and executing."  

One of the greatest changes in federal resource policy seen in recent years relates to recreation. The 155 national forests administered by the U.S. Forest Service, comprising some 191 million acres in 45 states, now accommodates more tourists than does the single-use national park system (Figure 1). A new strategy for encouraging and managing recreation in the national forests, still within the

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18 LeMaster, Ibid., pp. 3-4.  
Figure 1. Total visitations to different federal lands for the period 1965-84. Note the dominance of popularity in visits to the national forests (USDA-FS), the largely boating recreation sites of the Army Corps of Engineers (CCE), and only then the national park system (NPS). (Borrowed from American Outdoors: The Legacy, The Challenge, The Report of the President's Commission. Washington, D.C.: Island Press, 1987. Page 58).
context of multiple use philosophy, is soon to be announced. In the stirring words of the Chief:20

"By 1990, I would like the Forest Service to be known as the people who routinely integrate land stewardship with superb customer services to strengthen and round out multiple use management on the National Forests."

Demand for outdoor recreation has grown faster than the population (Figure 2). For example, the Angeles National Forest has become an escape from civilization for the 10 million residents of the southern California metropolitan area. "With 27 to 30 million visitors a year, The Angeles...is also a place of almost inaccessible wilderness and great natural beauty."21

But it is my contention that the decade of the 1980s will be recorded by history as the period of greatest change in American forestry. The momentum has only been gathering. Last year alone saw the forest practice laws of Oregon and Washington completely revised in the direction of fuller environmental protection. My point would be served by describing these changes in more detail.

**CHANGE IN OREGON**

The year 1987 was a hectic one for the development of forest policy in Oregon, our leading softwood producing state. Governor Neil Goldschmidt introduced and approved the most significant piece of forestry legislation since the Forest Practices Act was passed in 1971. Nor was this a squeaky partisan victory for the environmentalists. Indeed, House Bill 3396 passed the Senate 27 to 1, and the House accepted it by a vote of 53 to 2. Briefly, four major changes emerged:

1. The existing 12-member Board of Forestry, previously formed by nominations presented by special interest groups, was replaced by seven new members, no more than three of whom may receive a significant portion of their income

Figure 2. Projected percent change in participation in various forms of forest and rangeland recreation, 1980-2000.
from the forest industry. This was a change long sought by environmental interests. Forestry, in effect, traded some of its long-standing convictions about the Board of Forestry for exemption from the land use laws. Interestingly, industry leaders fully accepted this change, because they felt the old board (and Department of Forestry) was losing credibility within state government. Ironically, during the legislative session the state's attorney general ruled that the previous method of choosing board members was probably an unconstitutional delegation of authority in the first place. The new law requires the board to implement the bill and to submit a final report to the Oregon legislature by November 1, 1990.

2. A new agency was established to facilitate a considered state response to federal forest planning, the so-called "Oregon Alternative." This change reflects Governor Goldschmidt's commitment "...that Oregon will be more assertive in the federal forest planning process to ensure that the plans produced reflect the best interests of all Oregonians." Federal land, comprising over 51 percent of the state, is critical to the economic and environmental concerns of Oregonians. Nearly one-third of the state's manufacturing jobs emanate from lands managed by the U.S. Forest Service and the Bureau of Land Management. And virtually all of the state's residents enjoy the aesthetic and recreational opportunities from these federal lands. Accordingly, Governor Goldschmidt ordered henceforth... "that the state actively participate at all stages of federal land use planning to assure that the federal plans are consistent with state and local plans and meet the future needs of all the people of this state."223

3. For many years in Oregon there had been serious conflict between forest practices and land use authority. Lengthy negotiations between the forest industry and environmental groups, spearheaded by Gail L. Achterman, assistant to the governor for natural resources, lead to resolution of this problem. Credit was given to Fisher and Ury's method of "principled negotiation."24

"The objective is to look for areas of mutual gain wherever possible. When interests conflict, as they inevitably will, the parties insist that the result be based on some fair standards independent of the will of either side. The objective is to reach a wise agreement - one which meets the legitimate interests of each side to the extent possible, resolves conflicting interests fairly, is durable and takes the public interest into account."

According to State Forester James E. Brown, "Forest land-owners now will be able to plan their future with a certainty that there will not be conflicting laws and rules regulating forest operations."

4. Finally, significant changes were made in the Forest Practices Act to require the new board of forestry to provide explicit protection for air and water quality, soil erosion, as well as fish and wildlife. These changes were designed to:
   a. Improve the existing policy statement;
   b. Protect specific resource sites;
   c. Establish a new appeals process;
   d. Strengthen enforcement with civil penalties;
   e. Provide for coordination with other state agencies.

This transition seems to be running smoothly in Oregon. The new board has met three times to date (March 1988) and is on target for its statutory mandate. This experience proves that forestry need not be a polarization of either exploitation or preservation. As Gail Achterman thoughtfully concluded:

"What it does mean is that if we are going to harvest trees we must do so in a way that is respectful of the land and its long-term productivity and respectful of the complementary uses that can and will continue to be made of our forests. I believe profoundly that this is what Oregonians seek - a harmonic balance, a rooted companionship with home ground."

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CHANGE IN WASHINGTON STATE

Silvicultural practices in Washington during the decades of the 1960s and 1970s, according to one reporter, set the stage for change in forest policy. State regulators at the time "viewed vast, ruinous clearcuts as things of beauty and regarded environmentalists as varmints on the landsliding landscapes of progress." Public outcry resulted in an 11-year war, with the first salvos fired with passage of an amended Forest Practices Act in 1975. What followed was more conflict, confrontation, and litigation pitting the treaty Indian tribes and preservationist groups against the timber industry. Government regulators were now caught between them. In short, this legislation satisfied no one:28

"Industry groups were convinced the new act took away their operational freedom and increased their costs significantly. Environmentalists were certain they had been patronized with a document that had no teeth."

And the Tribes felt thwarted by the absence of statutory protection of their treaty fishing and hunting rights -- or recognition of their archaeological, religious, and cultural sites. The ensuing war was fought on a succession of battlefields, "stretching from the woods to the Forest Practices Board, from the courts to the legislature."

The skirmishes went on for years, with little change in inherent mistrust between recalcitrant antagonists. The fight itself was to take on more importance than the natural resources at issue. Spokesmen of one view or other had stopped listening to each other, and attacked what they believed the opposing views were. Meetings consisted largely of screaming and shouting, with each side guilty of making hacks out of technical experts by forcing them to prove preconceived conclusions. Regulatory and legislative decisions became based on the muscle of the advocate, not on the merit of the issue. The war, it seemed, would go on forever, and, without hope, there was little incentive to find lasting solutions to growing

29Timber/Fish/Wildlife: A Report From The Northwest Renewable Resources Center, Seattle, Washington (1:1, Summer 1987).
problems. And it became clear that more boilerplate regulations would not do it. Stalemate.

This impossible situation reached a climax in the spring of 1986, when the Forest Practices Board proposed yet another set of revisions dealing with cumulative effects and riparian protection. The reaction to these unpopular amendments was predictable:

"Battle lines were drawn, court suits were threatened, and legislative action was proposed. The elements for a classic environmental confrontation were in place, and all parties were polishing up tactics, dirty tricks, and counterattacks... The only sure winners were the attorneys and consultants who stood to make money."

But common sense prevailed. Two of the leading combatants decided that enough was enough, and that nobody - preservationists, industry, politicians, or the tribes - would win in the court of public opinion. Stewart Bledsoe, Executive Director of the Washington Forest Protection Association and a former state legislator, called upon Bill Frank, Jr., Chairman of the Northwest Indian Fisheries Commission, to ask if another more creative and flexible approach could not be found to reach a nonviolent solution. These two old but respectful warriors agreed to try. The events that followed are truly remarkable and, as suggested by the Seattle Times... eventually may be viewed as historic for the nation.

First, The Northwest Renewable Resources Center, and particularly its chairman, James C. Waldo, was invited to serve as facilitator to find an effective, creative solution through cooperative problem solving. Second, about a month later, some forty long-term antagonists, distinguished only by their mutual dislike and distrust, were brought face-to-face to see if "a better way" could be found. Third, the participants found that people they hadn't spoken to - or even said a kind word about each other - for years found the person across the table not so bad after all. And, even more surprising, they found they could listen to each other. Combat turned to collaboration.

Four months and over a hundred meetings later the participants were close to natural resource history. It had become clear that every group was going to get

something out of the negotiations, but nobody was going to get everything. The important point is that the agreements were forged between the conflicting groups, and hence had built-in commitment. By November, the Forest Practices Board approved unanimously the settlements reached on many critical issues: riparian management, roads, timber harvest, and management systems. One of the environmentalist negotiators summed up the experience neatly:

"Personally I never want to go back to gut-wrenching confrontation. The TFW participants have all changed to a new paradigm for dealing with each other and with potentially conflicting impacts on timber, fish, wildlife and water resources. We can get more for our particular resources by helping others get something for their resources - it is not a zero sum game. Our greatest challenge is to help the non-participants to understand and join us in this new way of thinking."

CHANGE IN CALIFORNIA

Most people think of California in terms of Disneyland, the 49ers, smog, and the Golden Gate. Few put my state in the context of forest products. But it is an important industry. In fact, we are the largest consumer and second-largest producer of softwood products in the United States (Figure 3). Nearly five billion board feet go into our houses and hot tubs a year (Figure 4). Yet, on a per capita basis, or in comparison with output of other industries, forestry is not a dominant part of our economy as it is, say, in Washington or Oregon. As a result, the forest products industry is not a major political player in the state. If considered alone, separate from the other states, California would be the sixth largest nation in the world (Table 1). Some say we will push France out of fifth place in the near future. This is not boasting, merely a recital of fact better to describe the problems of growth and change that I suggest you might consider in your long-term Provincial planning.

California is a difficult state to describe, even for a native son. And we local boys are fast becoming as endangered a species as the spotted owl. With some 27 million people, we are the most populated of states and still among the fastest

Figure 3. U.S. and California lumber consumption, 1950-2030.

Figure 4. Lumber production and consumption in California, 1950-1987

Source: U.S. Forest Service 1987
Table 1. Top World Economies (a).

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growing. By year 2000, we expect to have at least 32 million Californians—perhaps 40 million people by year 2020 (Figure 5). And therein is posed a problem for forestry. Fewer of our residents today, and even fewer tomorrow, were born, raised, and educated in the California I knew as a child. Then the home-spun ethics of tree fanning, logging, and forest-fire fighting were inculcated in our thinking. Instead, we have become a state of immigrants. Surges of people cross our boundaries or enter our ports every day, bringing with them different perceptions of forestry and resource management. Often these views reflect distant places where environmental problems have reduced the quality of life or even have threatened their very existence. Once settled in their new state, these immigrants show concern over population density and diminution of the environmental quality and scenic diversity they came here to enjoy in the first place. Accordingly, frustrated county governments have approached the problem in one of three ways: (a) trying to curb the influx of new residents and businesses; (b) insisting on detailed public review by public hearings on environmental and economic impacts of proposed projects; and, (c) trying to stop urban sprawl by permanent zoning of agricultural lands. In 1986 alone, some 45 growth control measures appeared on local ballots (Figure 6). Second, California, joining a major trend seen across the country, has changed from a representative democracy to a participatory government. Increasingly, people want to be a part of the decision-making process, especially in environmental matters affecting their property, their safety, or quality of lifestyle as they perceive it. Scientific or technical issues no longer are immune from public criticism. Foresters no longer can hide behind their professional training, as all sorts of issues are being taken away from experts and thrown into the political arena. Third, zoning. At first blush, one would think that farmers would be eager to see their property remain as farmland. But the economics of world food production tends to make farming in high-cost states increasingly unattractive. More and more farmers, as a consequence, feel "squeezed out" and look to sale of portions of their property for housing or development as a profitable alternative to subsistence agriculture. In short, farmers do not want to be told by government that they can't sell their land because urban dwellers want the greenbelts and open space surrounding the cities and suburbs. This is one of the hottest issues in current California politics. It seems to me that for the forest industry to prosper, let alone to survive in an urbanized state, we must first consider means of achieving a social endorsement in an era of conflict over silvicultural practices as intense as any in recent history. Especially in my state where we must accept escalating migration from urban to rural areas, and where the rest of the business sector is successfully redefining itself as a truly global economy.
Figure 5. California population from 1860, projected to 2020.
Figure 6. Number of local growth control ballot measures, 1971-1986.

Source: Glickfield and Graymer, unpublished data.
What is meant by the term "social endorsement?" Broadly, it is an approval or a sanction of something, so what I have been considering is to obtain social approval of forestry in California. The profession of forestry must first see by what standards society is measuring its performance. If it can meet these standards, forest practices will win approval. If not, it will remain under attack. To these ends, and while in this superb academic setting, permit me to address four questions to the profession of forestry.  

First, what is it that we want accepted? Is it the continuation of timber harvesting and the existence of the timber industry? Is it the continued use of clear cutting, herbicides, and other techniques that are under question? Is it the role of the professional forester as the decision maker in timber harvesting? Is it a question of professional ethics and feeling like you do not have a niche in society at large?  

Second, who in society must we be endorsed by to be accepted? The courts? The legislature? The press? Environmental groups? The timber industry? Our neighbors? Ourselves? How we answer this question is both a matter of perception and tactics.  

And third, what are the consequences of not receiving some kind of social endorsement? Will the state's licensing program be terminated? Will someone other than foresters be given the power to decide about harvesting or tell us what is socially acceptable silviculture? Will timber harvesting be stopped or made prohibitively expensive? What you believe to be the consequences of not having a social endorsement are important, because this will determine just how much you are willing to change to meet society's standard of acceptable behavior.  

And, most critical, if society defines a different role for its professional foresters in relationship to the practice of forestry, are you willing to accept the responsibility? To me, this is the real question. As I recall legislative proposals and Board of Forestry discussions over the past five years, most have been directed towards increasing the responsibility of the professional forester. The profession has raised some very strong arguments that favor caution - and we must go slow. But maybe what we are really talking about is not whether society will accept foresters, but will foresters accept what society is saying that it wants.

"Several paragraphs following were borrowed from the author's address to the California Licensed Foresters Association, "On Achieving a Social Endorsement of Forestry." Redding, California; March 5, 1988."
Perhaps because my personal values are so basic, it is perplexing to live in an urban society that is undergoing such rapid change. I just get a fix on what seems appropriate and it changes. My life as a forest policy maker is full of contradictions. In business, lack of flexibility is deadly. In fact, I realize that change is the most salient fact of our time. Just look around you. It is everywhere. The world, as described by Peters, is a chaos of change.

To an old-time forester, logger, or timber grower, the world must indeed look upside down. Everybody considers himself to be an environmentalist (Figure 7). In fact, Americans value being an environmentalist. In a recent Times Mirror study of the electorate, 39 percent of the people polled considered themselves to be "environmentalists." Only labels such as "anti-communist," "religious person," "supporter of civil rights," and "supporter of peace" were more commonly listed. Such a study is open to interpretation, of course, but it still says a lot about how people want to be characterized. Such polls of public opinion involving environmental quality were not heard until about 25 years ago. "In 1969 only one percent of the American population considered pollution to be an important problem." Today, where do you think that the benefit of the doubt will go in the issues of sustained yield, clear cutting, or herbicide application on private land? To the industry or the environmentalist self-characterization?

And what about those crazy timber harvest rules the Board of Forestry has adopted for the highly urbanized counties? Things like:
   a. A plan for hauling routes;
   b. Notice of proposed harvesting to adjacent owners of neighboring property and those along haul routes;
   c. Requirements that hauling be done during weekdays in non-peak traffic hours; and,
   d. Use of performance bonds.

How chaotic are the attitudes and values embodied in these rules such as protection of scenic resources, desire for public safety and minimized traffic congestion, control of noise and dust, and demands that roads be left in good condition after use? These attitudes will become more and more common when urban-type residents settle on or near forestland. Am I exaggerating? I have seen active indications of similar values in at least seven other California counties. The U.S.

'Achtennan, Off. cit., p. 2.'
Relax environmental protections to achieve growth (5.0%)

Slow growth to protect the environment (27.0%)

No opinion (3.0%)

Provide environmental protections and grow (65.0%)

Source: Field Institute, 1985.

Figure 7. Views on environmental protection versus growth.
Forest Service has heard similar vocal concerns on almost every draft forest plan in California.

Let me return to the article by Professor Duerr referred to earlier. There he points to changes in forestry that have been reflected in its declining acceptability. Fundamental is that classic tenets of forestry are invalid today. Drawn from Europe, with adaptation to America, classical tenets say timber growing is king, with the true value of forests seen in wood, not wildlife or scenic beauty. The forester, we were taught, should be considered the legitimate expert about how forests are used and managed. Management must be for sustained yield over long rotations, with the right to harvest assumed and guaranteed. And the notion existed that people in the woods are more of a nuisance than anything. How many of you were trained this way? How many of you still think this is true?

Nothing could be further from the truth in the United States, and especially in California. What we see today is a tipping of the timber - non-timber balance in favor of non-timber, especially recreation. And the general standards that foresters are judged against reference their ability to meaningfully deal with recreation, water, and wildlife while they grow and harvest wood. This is not to suggest a categoric dismissal of commercial forest products, or a refutation of the biological renewability of timber, or of the need for continued improvement of silvicultural methods. Not at all! If anything, our forests will continue to take on renewed importance in our economy with the enlightened practice of forestry. We have only scratched the surface in wood chemistry and forest genetics, with diverse plastic products, new food flavors, and possibly even food itself from enzymatically degraded cellulose in the offing. And enrichment of laminated and reconstituted wood products from tennis rackets to stadium beams to particle boards will continue to replace traditional sawn boards. The sign of future success may well be the amount of diversification provided by forest management, not its efficiency of timber production. This is certainly what lies behind the Board's special rules in California. Neighbors do not want their roads, water supplies, or viewsheds damaged. They do not want their children hit by logging trucks. Others are concerned about the protection of an archaeological site or a rare and endangered species (Figure 8). It is important for us to realize that neighbors should be seriously attended to. A national trade journal describes:

Figure 8. Timber harvest plan protests shown as a percentage of all timber harvest plans.

"Big Creek Lumber Company of Davenport, California, and other redwood-harvesting companies like it, are probably the most strictly regulated lumber companies in the forest products industry. Because of the complexity of that state's forest practice act, and the welter of special rules it contains, these companies are enmeshed in a regulatory weave drawn so tightly a spider would envy it."

But, in response, I would suggest that this specificity of requirements has reduced the harvest approval process to a question of legal compliance, rather than the former highly emotional and politicized procedures. And Dale Holderman, Big Creek Lumber's chief forester, reasons that because of this "this public is reassured and hence supportive of his company."37

Court losses have occurred because of the lack of comprehensive documentation, especially the cumulative impacts analysis. Courts are telling us that timber harvesting plans must show the complete thought process of the forester. And they must show what will be cumulatively impacted, when, how, where, why, and what is to be done about it. Comments by the public and interdisciplinary review team members must be fully considered as evidenced by thorough responses. Conclusory responses, such as "trust me" or "I know what I am doing" will not appease either the courts or the public. Responses to comments must demonstrate reasoned decision-making with appropriate references to information. In short, the court is looking for complete cumulative impacts documentation in the plan, independent evaluation of the plan, and a conscientious response to comments on the plan. This is a very clear standard of social acceptability.

Underneath proposed new legislation in California are suggested answers to some troubling questions. What do we do about liquidation of growing stock to pay for forest property acquisition when there may be no demonstrated intent to grow trees over the long-term? Should we try to control the rate at which the remainder of California's old growth timber is liquidated? How can we provide for investment in non-timber values - things like stream buffer zones, snags and other habitat for wildlife, protection of archaeological sites, and viewsheds? How can we build more certainty into the right to harvest, and at the same time provide for a meaningful outlet for the public and local governments to voice their concerns. These questions are haunting, and to me represent the shift in values that are critical in the development of forest policy that is in the public interest as well as

37NFPA, Ibid., p. 2.
commercially feasible -- at least in California and the older West Coast states. But conceivably in Alberta as well sometime down the road?

Is social acceptance achievable in forestry? My answer: yes! This is despite the apparent chaos going on now in forestry and the difficulty in changing attitudes. I say "yes" with resounding conviction because I have been heartened by the past and current efforts of the profession to cope with change. When dealing with chaos, the most important thing is a flexible plan that has achievable and verifiable goals aimed at specific problems.

Let me try to summarize some of the foregoing changes seen in forestry:

1. The profession has come to realize that its former status in the community and its old rules of practice have lost a considerable amount of social endorsement;
2. Recreation and other "multiple uses" of the forest, such as wildlife and water quality, have passed timber harvesting on the ladder of social needs;
3. Increasingly, the renewability of our forest resources has been challenged, and average real prices of wood products are increasing relative to prices of alternative commodities (Figure 9);
4. In the hierarchy of public approval, it has become clear that present trends favor reconstituted material - such as fibers and chips - over wood in its basic form.

Unlike minerals - gold, coal, and oil - that are mined until depleted, timber is a renewable resource. At least in the biological sense it is renewable. Second growth Redwood emerges from the oldgrowth, and so on. The harvested tree is replaced by the natural process of regeneration. But what matters more is the social renewability of forestry, and this is quite different. Reverting again to Duerr's theme:

"Trees may be renewable; owner and owner's policy are not. Timber is socially renewable in the sense that society can decide the extent of its renewal or of its replacement by metal, glass, plastic, or some yet unheard-of resource to be created through human ingenuity."

Hence, I have been long advocating the need for the forestry community to effectively adapt to its changing environment as the only way to ensure its own longevity. Or survival! Such adaptation is not easy - change is never easy - but


forestry policy in the western United States has been developing several new approaches to reverse past losses of credibility. The states of Oregon, Washington, and California each have recently taken major steps forward in the areas of forest practice regulation, relations with local and federal governments, and professional endorsement. While somewhat disquieting to me personally, these innovations cast a hopeful light on the future. Through institutional innovation, West Coast forestry can remain a renewable profession.

How society decides on the renewability of our forests is a function of many things, from economics to politics to social values. It is also a function of how well we deal with change. Fundamentally, social renewability is a blending of attitudes about what mixture of uses forests should produce coupled with widely differing understandings of what forests can produce. Those of us in the forestry community must develop ways to influence how people think about what forests should and can produce. "Should" is a matter of politics. "Can" is a matter of biology, silviculture, and management. Foresters and industry executives must somehow anticipate and hear what society is saying about "acceptable" forestry given the many changes going on around us. If met through biology and management, the forestry community can reorient itself to meet society's demands. But foresters must be willing, indeed must have a positive attitude in order to reorient their thinking. I am convinced that with effort we can reorient and help society better define its mixture of forest uses. If society's demands on the forests exceed what can be produced, we must make it clear that society cannot have all it wants. We must inculcate in the population at large the basic principles of forest management and protection - and the problems brought to forests by people. This is the ultimate irony of social renewability: people must understand that their activities impart and sometimes threaten the very forest resource about which they are making political decisions. Ultimately, the social renewability of forestry implies that man must learn to manage himself as well as the forests. This is a bigger challenge to us.

Let me close, if my forestry colleagues and contemporaries will permit me, with a personal and heartfelt word to the young people gathered here. You who are forestry students at the University of Alberta must prepare yourself to join that new profession. You will be the leaders. It will be an exciting place. Look inside yourselves. Find your strengths. Challenge your assumptions. Become comfortable with the risk.
Protection of the environment and accommodation of economic development remain barely explored frontiers. The accelerating rate of information availability and the growing world population will raise severe technical and ethical questions about the environment, including our forests. If we are to deal with these global problems, the world must have professionals who are trained both in science and people in a practical way. Forestry is one of the best disciplines for this type of training. What I see in the years ahead is a series of new environmentally-related occupations for which foresters could be well trained. I would have no fears - were I to do over - about pursuing a career in forestry. I would make certain that my training was very versatile. I would not count on a woods job in the traditional sense, but rather look to being part of a new wave of environmental professionals. You will have jobs; society will demand it. Your key for success is to take each day at a time. Work for your ecology, your community, and, above all, for yourselves. Be the best you can be. You are the future. Good luck and thank you!
BIBLIOGRAPHY


Jack Epstein, "Raiding the Redwoods: How junk bonds are carving up one of our last timber empires," California Business, September 1987.


FOREST INDUSTRY LECTURE SERIES

10. Stocking Control and Its Effect on Yields, by Dr. Peder Braathe. 4 November, 1982.