

MEAD

Mead - MG NOTES

7. Mead Conf.

~~Solicit short statements from everyone~~

~~15 min. modules~~

~~Sat. PM~~ Not only jaguars, also b.s., insofar as can reconcile that w.
~~Bachman~~ what have to say

Thank ~~you~~ ^{each} for listening respectfully to others (even when they may not have deserved it.)

Key issues & their policy implications

1. Externalities

a. Pecuniary (downstream, upstream, sidestream, etc.)

How much? Scott a skeptic. McKillop not.

Do they justify ~~subsidies~~ special treatment?

What special treatment?

To what stage of prodn?

Extractive -- basic, fundamental, etc.

Mills? to enhance resource value

Cities? A. Smith, Muntoux, etc., cities vitalized country.

b. Physical

Watersheds

Wildlife, ecology.

Multiple use

Measure in \$?

2. Distribn.

Consensus -- Crown owns rents.

Conflict of distrib. & effci?

Pearse says no.

Collecting rent destroys it? Bonus vs. royalty systems.

Bonus is inaccurate, but only moreso than appraisals?

3. Discounting

a. Can we define rent? Use HP-80

b. Fuel, rotus? Consensus for them? (min not bad, but $i > 0$)
(They are consistent w. S.G.) Teequnlon.

4. ^{Modulated} ~~even flow~~ formula, s.g. (Even Lewis takes it seriously)

Does it achieve comm. stab?

Does it cost too much? ~~Even cost, one long about~~ Low on low price.

Does it loose up the mkt?

Does it prevent intensive use of best land?

Consensus, need to stress intensive use of best land more.

Stability at what level?

Shd. we bring down stock before levelling off?

"Modulated flow" - McKillop.

5. Close utilizn. Consensus against it? But
someone was for it, to offset royalty effect. Resolve.

6. Log export. Bush vs. it; ^{Lewis} ~~for~~ for it. Campbell says
price is higher - shd. we use it in appraisals?
Can priv. tenants do it, & public not?

X 7. Mgmt. of SGLs -

Smith & Ainscough say it's bad. TFLs cut faster

8. Markets. Smith, Painter, say it's ok.

~~B.C. natives say it works OK;~~ Scott plan. Increment of route to go. jump.
Is vert. intx desirable - can it be broken up
w/o cost? Desirable to improve credit? Not if hurts everyone else's.

Meat Plan

Mktg. Board

Subsidies & price — farm 5.

9. Appraisals.

J.F. says "profit" shd. be related to capt. invested.
Meat's data good enough.

~~10. Ecology~~

10. Tenures.

(Markets)

Shd TFLs be given to fee simple

→

Shd. competitive bidding be prevented?

Is it spite or preemptive bidding?

Effect on mkt

P R O G R A M
THE B. C. INSTITUTE
FOR
ECONOMIC POLICY ANALYSIS

GEORGIA HOTEL
VANCOUVER, B. C.

April 4-6 1974

SUBJECT: POLICY FOR DEVELOPING B.C. PUBLICLY-OWNED TIMBER RESOURCES

Thursday, April 4

9.00-9.45 Keynote Paper, The Honourable Robert Williams,
Minister of Lands, Forests and Water Resources
Province of British Columbia

9.45-10.30 Hartley Lewis (Pearse Bowden Economic Consultants Ltd.)
"Goals of Public Timber Management"

Coffee break

10.45-11.30 Julius Juhasz (B.C. Forest Service) "Present Styles and
Recent Changes in the B.C. Timber Appraisal, Sales, and
Management Procedures"

11.30-12.15 Discussion from the floor.

12.30- 1.30 Lunch

1.45-2.30 Carl Newport (Mason, Bruce & Girard) "Alternatives for
Modification of Appraisal, Sales and Management Policies"

2.30-3.15 Marion Clawson and William Hyde (Resources for the Future)
"Managing the Forests of the Coastal Pacific Northwest
for Maximum Social Returns"

Coffee break

3.30-5.00 Discussion (Three discussants will each have 10 minutes
to discuss any of the day's papers. The remainder of the
discussion time will be from the floor.)

1. Tony Scott (University of British Columbia)
2. Wm. Young, District Forester, B.C. F.S.
3. Gerry Burch (B. C. Forest Products)

Friday, April 5

9.00-9.45 Grant Ainscough (MacMillan Bloedel Ltd.) "The B.C. Land
Tenure System"

9.45-10.30 Milton Moore (University of British Columbia) "Competitive
vs. Non-Competitive Timber Sales Policy"

Coffee break

10.45-11.30 Walter Mead (University of California, Santa Barbara)
"Log Sales vs. Timber Sales Policy"

11.30-12.15 Discussion by discussants and from the floor.
Discussants: 1. Sam Sidneysmith (Simon Fraser University)
2. Mike Painter (Council of Forest Industries of
British Columbia)

Friday, April 5

12.30- 1.30 Lunch

1.45- 2.30 J. P. Kimmins (University of British Columbia)
"How Provide for Environmental Protection --
By Regulation or Use of the Price System?"

2.30- 3.15 John McGuire (Chief, U.S. Forest Service) "Timber
Policy Issues in the United States"

Coffee break

3.30- 5.00 Discussion
Discussants:

1. Pitt Desjardins (Weldwood of Canada Ltd.)
2. Robert S. Wood (Sterling, Wood & Associates Ltd.)

6.30 ----- Dinner

6.30 Transportation will be available at this time to
take us to the UBC Faculty Club.

7.00 Cocktails

7.30 Dinner

Saturday, April 6

9.00- 9.45 William R. Bentley (University of Michigan) "Security,
Uncertainty, and the Value of Public Forestry Investments"

9.45-10.30 William McKillop (University of California, Berkeley)
"Analytical Techniques and Social Constraints in Policy
Formation"

Coffee break

10.45-11.30 J. Harry G. Smith (University of British Columbia)
"Investment Implications of Sustained Yield Theories and
Criteria for Improving Forest Land Management"

11.30-12.15 Discussion by discussants and from the floor.
Discussants:

1. Barney Dowdle (University of Washington)
2. Les Reed (F.L.C. Reed & Associates, Ltd.)
3. Dennis Teeguarden (University of California,
Berkeley)

12.30- 1.30 Lunch

1.45- 4.00 Round-up of issues. This floor discussion will be taped
and should cover all major issues of B. C. timber sales,
management and investment policy. Where consensus is developed,
policy agreements should be clearly stated. Where fundamental
disagreements remain, the pro and con arguments should be
clearly outlined. The manuscript will be edited and published
along with the conference papers. This session is a critical
part of the conference and I urge you to attend and participate. Speak
up so your views are adequately weighed in the consensus.
Dialogue, rather than debate, is the order of the afternoon,
with everyone given a respectful hearing.

7: Mead Conf.

Welcome & Intro.

Jeann I Weld
Ken Reid
~~W. Mead~~

BCI - halfway house

Large partic. in public discussion of hi priority problems.

Not a task force. A dialogue. Maybe consensus. Many voices.

Press here. Bob McMurray

spell names right. But don't say we speak for govt.

Papers available.

To be published

Congrat. W. Mead & contributors.

~~Jeff Hunt~~

1. Hartley Lewis

"Basically resource oriented"

30% empl. "derived from" forest indy. "Mfg. processes res."

As opposed to "heavy mfg."

Task Force.

1. Max. welfare.. Efficiency. Manage so as to max. ^{PV of} rents.
2. Collect rents Distribution

1. No practical way to max. ~~rents~~ PV of rents -- ?
2. Stability; growth; who grows?

1. What to cut.
When

Conflict between distr. & efficiency — by collecting rent you ~~the~~ may reduce efficiency.

Sustained yield
Close utilization.

Export control. — Province does this on lumber.

Bad way to encourage heavy indy. and empl.

Encourages minimal processing to avoid export limits, and thus aids a few who can take advantage of this. Subst. need for labor.

Ec. solution causes wide swings in cutting, not acceptable.

B.C. has no control of prices & $\therefore$ Q rather than P wd. be the balance wheel.

Rents foregone gives you measure of costs of ~~re~~ departing from free market.

Scott. If no forest, wd. 30% of ec. be gone.

Pearce. No conflict between eff. & distrib. — but rationale not too clear.

McKillop — include indy benefits in rents.

Ainscough — Labor sees jobs as benefits, not costs. (How about welfare as an alternative?)

What if everything has externalities to everything else.

2. J. Juhacz
(Was an engineer)

TFL not sold by comp
PSM is " " " in form, but not substance.

Return to op. "cost plus profit"

→ If someone builds a plywood mill where there was none,
what is value of stumpage? (Extremity)

Interior appraisal system discussed (current system is being
changed.)

Until last year, only lumber was the end product ~~being~~ on
which value based. Now, chips too. And pulplogs, or logs.

Next, distinguish pulplogs & sawlogs. Difficult.

12" & over is "large" log; smaller is "small".

→ Lumber "recovery factors" are ^{unknown.} highly variable. But "grade" is
quite uniform, i.e. quality.

Ex. volume of lumber, chips, & pulplogs.

No mkt. for chips. Price is too low.

Profr - is % of sum of [stumpage plus operating costs]
→ Not related to inv.

Smith - there is a good log market.

Johansen - VLM prices are out of line with costs - higher, much.

Rejsandine - the logs that pass in the sub-place are
"mgnl," - (to him.)

Emphasizes specialization of old coastal mills, complexity.

Smith - VLM is in hi-quality logs, from priv. land, higher
than from Crown land. F.S. said not to be
sensitive enough to grades.

VLM usually involves better element (suggests controlled market)

Tee garden - use income or property tax instead.

Rejsandine - pro vertical inter.

Hart - a. tax rate is 55%, sum of all taxes.

b. 4% in 1970

c. Mills have different goals, shld. be treated differently

d. Chip price is priced too high.

Tall F.S. man.

Requiring unprofitable low-grading has made it
become profitable.

Campbell - export logs sell at higher price, & are not counted in appraisal.

Payment is made ~~on~~ on scale, not cruise. But appraisal is made on cruise.

Bentley - Adams - Had it too easy. Question him
Security of Supply

3 issues

1. How much to invest
2. When to liquidate
3. Term of trade, i.e. how much to charge.
4. Distrib. of receipts

Smith

1 issue. Need security

- to raise money

- to build mill. (But no one said for how long)

(or even specified the mill.)

No one mentioned free market as secure supply.

... .. - need to build a fire under secure owner.

Clawson

PNW is growing ^{at} slower rates than "capacity"

Greatest concern is for forest land

Forest input.

p. 31, summary,

Mat. wastes exp. is very high, \$800m a year at 5%

Reduce inv. by \$12 b

p. 42 supply curve, very steep

1/2 b cuto timber, can grow at \$5 per

Multiple use

Inconsistency of requiring high profit on nuts, and
zero on timber.

Fallacy of demanding security to get low borrowing rate

→ Canada is diff. b.o. is higher here, & wood is cheaper.

Kimmins, Longer rotas. are good ecology.

Scott

Is supply security key? It helps (but needs defining)

Young. Goal is max. ~~wood fiber~~ prodn. of wood fiber plus other things.

Best first? Huntley says so.

Young says, cut degenerating stands first.

Protect forest land, regardless of cost.

Questions use of i.r.

Burch

1. Max s.y. is not applied in B.C.
Wants s.r. flex. in cut.

2. I.r. ~~but~~ should have no place in going opn.
Expense expl.

3. Supports low grading from submarg. stands.

4. Logs & chips shld. not be exported.

5. Max. is ok.
Henzlik is good.

Min. logging costs, is goal.

Change to shorter rot, is inevitable.

Ainscough — invests. must stand test of comp. int. (except planting.)

But Buckle ends up w. an indirect fuel note.

Sydney Smith

Hart -

Wants, ^{to borrow at} low i -- then wants to get risk premium.

Ainscough

1947, pre & post, terms
post '47, regent. was purpose.

The later they were granted, the more likely to bear full
royalty, and export prohibition.

25% severance tax on sale of E&U lands after 1946 (?)

Early 1900s, square mile grants, bonanza days
'54, 1% profit, tax, but TTL exempt.

'30s, many licenses reverted.

("hunks" were belt of Fed land along r.r., reverted)

"Spite" or "black-mail" bidding — sounds like ordinary preemptive
behavior. How helped by preempting for outsiders.

→ Bidding fee is 5% of bid price. Forfeited.

Notable exclusionary device.

Colcl, P.R., got first TTL, gave new well.

→ SYU is publicly managed, & TTL partly.

54, community stability. Sloan's prime recommendation.

4. TTLs, mostly on coast

Priv. land "brought under regent."

→ Allowable cut, met within 50% in any one yr., within
way

→ Works both ways, up & down. Penalties for over cutting and under cutting.

→ TFL have gone all out to get A allowable cut; PSYUs haven't
See Table 8

Milton Moore

Biggest problem is ~~the~~ statement of objectives by foresters

Preferred solution: appraisal system.

Mktg Board? Anti-trust enforcement.

VLM has 200 transactions/week, dozens of buyers & sellers

Mead

Appraisals are terrible

Adequate appraisal is one that stimulates compen.

Appraisals are too hi, then indy shd. want compen.

Idea of log whet; on dry land. Gov. sells logs.

Specs. length, grade, diameter. (Like whet board)

Timber sale gives non-uniform product. Grading, ~~sorting~~ sorting
bypasses that.

1. Diff.

2. Circumvents appraisal

In Oregon etc, bid exceeds appraisal by 50%, ca.

3. Responsibility to manage is clearly placed.

4. Eliminate negot., conflicts, betw. landlord & tenant

Problems

1. Indy. resists change

2.

3. Cap. negot. are

Lewis - high bids are systematically too high B.S.

Wood. B.C. is different from Oregon

Cap. gains tax effect, desire to inflate price of own timber
causes high bids in Oregon

Smith - U.S. appraisals

Teez. Objective of appraisal is not to approx. mkt. price.

P.U. concept, regulated rate of return - hence low rate of return.

Kinross - why do indies stay in business, (not an subject of paper)

Lyden with

Contractors are a problem, too.

Subsidize ~~the~~ xptn. to improve mkt.

Logs better than stumps, for a mkt.

Error factors are greatest in cost of

Painter. all is ok

Left vs. right, govt. enterprise vs. priv.

Is vs. quantum leap. (But moving to free mkt is there)

Is vs. govt. log mkt.

Pearse,

There are mkt's other than VLM

It is time that may interfere w. free log mkt.

Advantages cited by WM are of free mkt, more than govt. store scheme.

Ross. Wants more

Kimmins

Max. - Thesis, anti thesis, synthesis

"One input" - ok.

Against regms, & also vs. price system, & vs. s.y.

Pro guidelines, + classify. + personnel training in situ.

John McSwire

1 or. bd ft softwood in nat. Forest.
25% of annual cut

Decline from pot. western lands coming (when?)
Thus, a need for nat. forests.

7 factors. Key policy & tech issues.

1. Cuts

2. Env.

3. Mgmt.

4. Standards of utilization.

5. Even flow

6. Rotation

7. Size of planning unit.

2. Most objections to clearcutting are visual.

→ 3. Need to intensify mgmt. on better sites.

4. Adopted unit recently

5.6 Wants to keep ~~longer~~ longer rotations in NFs

7.6m Classroom et al vs. even flow. Requires larger planning units.

ORC act provided for coop. units, priv. & public — but they never got set up.

Clawson Paul felt old working circles were too small, were obsolete.

Mac Blo operates in Ala.

Desjardins

Ecology has been coopted.

Dealing w. absolutes, they can't be ranked.

Pro sust. yield.

Commons! — more in \$

Reed

Do not more in \$,

Bob Wood. Agrees w. M. Moore, compute residuals.

How to max. full value and still get total rent.

Pro appraisal — put more effort into it, refine it.

(Make intro. work by conig on best lands & areas.

Might even close off some areas until feds were getting competitive bids.)

(No one mentioned distribn. today)

Wood, cont.

S.Y. gets blamed for a lot. But it is very flexible.
Can accommodate everything.

~~History~~

Danger of not quantifying is to overstate factor -
viz. ecology.

Flamish values owls more bes. they are rare - but
they produce no energy.

Hent.

Objections to Mead's proposition are.

1. "Socialism" Riches of CZ

2. Small wine for, large wine against. Bes. ^{govt.} ~~he~~ is

Taking on an ex. of scale.

Now CZ has introduced wholesale log intake of their own.

(Ant., use outsiders more)

Mc Guire. 25% of sales go to countries.

F.S. pays for 8,000 mi. of roads a year with timber.

Mc Killop

~~Here~~

Price stability, & comm. stability.

1. Price stability

2. Community " He's for it.

Mobility is good if pull, not push.

13% decline is max. allowable per 10 years.

"Modulated flow." Pulled 13% out of the air.

P.V.

2dy benefits & costs shd. be considered.

"Ad income & wages" are 2dy benefits.

Recommends "expert base" technique. Use in "evaluating public int." — i.e., subsidize forestry.

Discount rate. Use what. OMB now uses 10%.

Opt. models. Timber RAM. Linear programming.

Mac in, mac out. — (MIMO)

A machine that will make up yr mind for you, and help bury your assumptions. Bewilder us with technology.

Harry Smith

(Object to calling mai "biological" - it is Marxist)

Area logged in B.C. - new data.

" burned

Advocate → Sell timber for lump sum. "STX" program lets us do it.
Let's you convert from bf to cf.

29 cf/a is mai in B.C. - it is low.

Cananda.

1% is rate of return on timber.

PSYUs are badly used.

Shorter rotus. 8 yrs, red alder.

$$\frac{g - c(k_i)^n}{(k_i)^n - 1}$$

Moore. Stop attracting growth.

Scott

Mkt. is competitive, but not representative

Desjardins says VLM is ~~not~~ representative; but others say not.

But they do not go into internal shadow prices, & internal decisions.

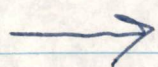
To 1% of coastal wood that goes thru mkt.

1. Crown should require a % to be sold on mkt., as condition of sale.

2. Require each firm to buy & sell x % thru mkt.

Select logs to go on mkt. by random selection.

Co. can buy back its own logs. Can also buy futures.



Achieves a quantum jump incrementally.

(If mkt. is monopolistic, hi price, raises approvals)

Please - change x% by nearness to Vancouver.

Me - there are other ways to force logs onto mkt. Now, we have forced logs off the mkt.

Burch. No export policy exists.

Many xactions are not reported.

Buck. 25% of boom, no one wants. (Why? something
terribly wrong... due to compulsory low-grading.

Dawdle - s.y. implies mai?

Les Reed

Jubilee - stumpage is too low;

Wms. Region 6, in PNW, stumpage is higher than
in B.C.

Teequander

s.y. is not actually followed. Shows we can
absorb change.

Avoid giving Smith long time to comment.

Vs. 2dry benefits

Use low i for allocating land, b/c. decisions already
made. (!) But hi i to plan rotations.

Learning & Tax Policy. Forest

W. Mead. Ask him to run it, 6-74. He's willing.

J. Hoven

Dave Klemperer

P. Pearce

W. Bentley

D. Teeguarden

M. Clawson

E. Wms?

A. Scott

John Mc Guire

Willy Osborn

Todd Lowry

~~John Hoven~~

Dick Lindholm

Chas. Love

John Fitzpatrick, F.E. Res. Insr., Dept. of Forestry, Ottawa.

Ron Beazley, S.I.U.

Robert Sugong, Anna Arbor

Emil Sunley

Don Flora, F.S., Portland, Box 4059

Robt. McMahon,

Prof. Richard Capel, Ag. Ec, U. Manitoba, Winnipeg.

Dick Hilleken

Nic Tideman, Uncertainty & exploration.
OTA, 964-2511.

A. Milton Moore, author of Can. Tax Fdtn, Forestry Tenures & Taxes in Canada, 1951.

B.C. School of Forestry



REFORESTATION IN BRITISH COLUMBIA

The subject of reforestation in British Columbia is sometimes misunderstood. Periodically, it seems, a headline will appear suggesting that the Province is running out of trees and this naturally concerns people.

The following information should help in an understanding of this important part of our forest program.

.4% ✓
Excluding parks and areas where logging is restricted, we have about 125 million acres of forest land in B.C., of which about half a million acres are logged each year. In 1972 111,000 acres were planted which is roughly one-quarter of the area cut. This figure can mislead people into thinking the forests are disappearing.

About three-quarters of the half million acres logged each year is in the Interior, much of it partial cutting where the surrounding trees remain to assist with seed to replace the crop cut. Even on the Coast, a good deal of the 125,000 acres clearcut each year comes back rapidly without any help from man.

✓ Actually, if we were patient, Nature would restock all the cut-over areas with no cost to us except the delay in getting a new crop started. Since we are only cutting about two-thirds of the 3-1/3 billion cubic feet annual capacity of our forests, the question might be asked: why spend any money on reforestation since we're in no hurry? There are two main reasons.

✓ First, planting allows us to choose the species and space them uniformly. Second, although Nature does a very good job in many cases, in some areas brush takes over and the area is then consigned to a long wait (unless we destroy the brush) while these weed species mature and are slowly replaced by a more desirable forest.

✓
✓ Altogether, when we take into account the time natural regeneration takes, and the areas where brush is a problem or the desirable seed source is too remote, it turns out that on about a third of the cut-over areas the considerable expense of planting will be repaid by the results. On the other two-thirds Nature competes favourably with anything we could do.

On an average, then, we should replant about 140,000 acres a year to keep up with logging. Perhaps a bit more, because logging increases year by year.

Since the 1972 planting was only 80% of this figure, it's fair to ask why we aren't doing more. The answer is we are--the 1973 planting will balance or exceed the need created by logging. Mind you, this hasn't always been the case. In the past there were higher priorities for funds because as long as we are cutting less than the potential of the forests, we can sustain the present cut for decades without any planting at all. In fact we might never need to plant if we held our cut to the present level. For many years, although we replanted desirable sites, there wasn't any reason to speed up Nature's efforts on most of the cut-over land. The money could be spent far more profitably on schools, or roads, or any of hundreds of other public works that compete for our tax dollars.

However, the situation is slowly changing. We can see a day coming when the demand for our production will approach the estimated capacity of the forests. There are also recreation demands that threaten to lock up forest land, thus reducing the total production potential. Other demands, such as rights-of-way, remove forest land from production forever. This means we eventually must have a fully stocked forest growing again as soon after cutting as possible.

This gradually increasing need to speed up Nature was foreseen, and the planting program has been methodically accelerated. In 1972 the area planted was six times that planted in 1960. The target is to nearly double this (to 75 million trees - enough for around 200,000 acres) by 1975. That's 50,000 acres more than is needed to keep up with logging. And the aim is to double it again to 400,000 acres by 1980.

Sometimes there is misunderstanding about the length of time it takes to increase planting. People will say: why not treble it this year? (Using the unemployed as planters). The problem is that it takes about three years to grow a seedling to the size that can be planted. So the stock available this year is dependent on the seed collection, nursery capacity and financing that was arranged four years ago. The some 70 million seedlings needed for this years planting were sown in 1971. Special stock grown in containers, a new technique being developed, will assist us to meet commitments and, if successful, will save both time and dollars.

What about disease and fires? Insects and disease rarely wipe out a stand and necessitate replanting. Fires can be more serious, but don't denude as much as logging does. In the 1960's the average annual fire acreage was 266,000 acres. But only 109,000 acres was merchantable or immature timber. Again, Nature gets busy reseeding these areas so fire adds only some 30,000 acres a year to the planting required. Some years the figure will be higher and some years it will be lower, but that's a good average to use.

Thus, in 1975, the planned planting will more than take care of both the logged areas and the areas denuded by natural causes. In fact this year it will come close to doing that.

✓ This leaves one other demand on our nurseries. About 7% (some nine million acres) of the total forest land in B.C. is classed as not satisfactorily restocked (N.S.R.) ✓ Two-thirds of this N.S.R. is in low-site areas in the northern part of the Province. Some day this two-thirds will get dealt with -- a lot of it will require some sort of treatment before planting is possible -- but right now it would make very poor economic sense to put a high priority on this sort of planting.

✓ This still leaves us some three million acres of backlog to work on. Incidentally, much of this "backlog" pre-dates logging or even the settling of this Province. We're looking at a natural condition and by planting it we'll be outdoing Nature.

This is why the plan is to expand the planting program to 400,000 acres (150 million seedlings) by 1980. That should be adequate since we don't want to build up a huge investment in nurseries that won't be required after the backlog is gone. We must just produce enough seedlings to whittle away at these N.S.R. areas at a sensible rate.

The public should be concerned about reforestation. It's very important and their concern will assure that the program gets the necessary money to continue a methodical expansion to meet the increasing needs for planting. There is, however, no need for anyone to worry about the program. British Columbia's forests are not disappearing. In the 1980's there will probably be more acres of fully stocked forest than there were before the white man arrived.

COMBINED INDUSTRY AND FOREST SERVICE PLANTINGS

	<u>No. of Seedlings</u> (million)	<u>Acres Planted</u>
Up to 1940	3	4,000
1941	9	11,000
1942	7	8,000
1943	9	11,000
1944	8	10,000
1945	1	1,000
1946	8	11,000
1947	4	5,000
1948	11	13,000
1949	8	9,000
1950	7	7,000
1951	8	8,000
1952	6	7,000
1953	5	7,000
1954	10	13,000
1955	7	11,000
1956	3	6,000
1957	4	8,000
1958	8	15,000
1959	8	18,000
1960	7	18,000
1961	7	21,000
1962	11	29,000
1963	14	39,000
1964	14	42,000
1965	18	53,000
1966	19	53,000
1967	18	48,000
1968	21	58,000
1969	26	67,000
1970	34	85,000
1971	43	107,000
1972	48	111,000
<u>TOTAL TO DATE:</u>	<u>415 million</u>	<u>914,000 acres</u>
Plan 1975	75	200,000
Plan 1980	150	400,000

U.S.Z.S.

1974 plan to sell 11.8 bill. b.f. timber.
Sust. yield is 13.6 bill. b.f.

- J. McLean, 7-16-73, Wn. Post

Tongass sale is 8 bill. b.f., to Champion & US Plywood
for sale to Japs.

$$\frac{8,000,000,000 \text{ b.f.}}{1,200} \approx 6 \text{ m units}$$

7: Conf., Timber Sales

Walter.

1. Some local issues

a. Secondary treatment, processing. Use for local housing,
too, that is a form of processing.

b. Planning location, so sawmill ships supply pulp mills.

c. Increasing cut to get lower rail rates;
also to justify new rails, -- & harbors, mills.

~~d. T~~

2. Time needed to amortize mills.

3. Relative values: timber inventory, roads, mills

Let the largest inv. dominate, for starters.

When is value added? (over)

4. Sources of employment.

Stability is needed most where there are most jobs
and homes. -- may be sacrificed elsewhere.

Major objective: maximize useful empl.

How: move empl. out of forests, into country, fabrica.

Shorten routes. -- part of same thing.

Value added, Julecar rule of thumb

Stumpage,	20	
Logging, hauling	25	
Milling	25	
"Profit & int."	15	(or what?)
<hr/>		
\$85		per unit.

(Shaper acctg needed, clearly.)

But the stumpage value is all added by land & capt., so it is a much larger invt.

5. Some local ~~to~~ idiosyncrasies; or local perceptions of general problems.

a. The sustained-yield policy has limited the amount of timber that can be cut in the Vancouver district, below opt.

Result: disjunction of indy.

b. B.C. has 86% of net taxable income of Canadian forest indy. firms from logging, vs. 28% from wood indy., 29% from p & p indy., 1970. (Borins p. 19) ~~But~~ ^{wood indy.} ~~fact~~ fig. may be a fluke, it is lowest in 5 yrs. ~~it~~ ave. was ca. 50%. But p & p % is stable.

c. Rothery's "profit ratio" $\equiv \frac{\text{profit}}{\text{cost} + \text{stumpage}}$

Denom. excludes profit.

Idea is to observe profit ratios where stumpage is bid competitively, then apply them to ~~to~~ assign stumpage a value elsewhere.

d. 1957-71, employment in B.C. saw & planing mill indy. remained about const. at 25,000 - 27,000.

Wage rates rose.

In same pd., timber cut doubled.

(There is a wood-conversion ratio I am sure.
Cheap stumpage & cheap labor lower the ratio.

[Borins gives us 2 Conv. Factors, p. 14

Coast: 6 B.F. = 1 cu. ft.

Interior: 5.75 B.F. = 1 cu. ft.

I guess that means on coast you get more B.F. of wood per log of given size. But I don't know why.]

Anyway, we've been using less labor/log, in the mills.

— If cap. goods are imported, we are substitg. foreign labor for B.C. labor, as well as cap. for labor. To Δ demand for local labor, discourage imported machines.

— Local labor costs empl. more than workers get, by a lot. Compensate for that. (A research project for a young est.)

e. Is there a bias in defining costs?

a mill is allowed typical costs of repres. firm.

If they're cap. int., their labor costs are less. So?

Mead

1. Jean Savin - measurement inadequacies.
2. M. Clawson.
3. Ecs. of scale.
4. Wed. Dec. 5 10 A
5. Taxation - still relevant, but lenses pay other taxes.
Kemper
Lindholm

f. Export of logs

1910 peak

12

50 m cu. ft.

10 m cu. ft.

The purposes of the conference are to describe ~~the~~
principles for a system of
desirable ~~system~~ ~~for~~ timber sales ~~and~~ ~~evaluation~~ ~~the~~ new B.C.
and management;
policies in light of these principles; ~~the~~ and identify
needed improvements.

Meend

Wants conf. session last PM. Arrange tape or steno.

Ask Bob. to give key.

Arrange an evening's entertainment

→ Draft para stating purpose of conf.
Call it down tomorrow.

Cowichan Mtg.

Endaka - P. Rupert

TFL, Tree Farm License

Public Sustained-yield unit.

John Stokes

Ralph Robbins ✓

Simon Ferston

Ted Young ✓

Les Reed

Ken Reid

Bob Thomas ✓

60,000 units, size of mill, opt., in land. (120,000 on coast)

Big mills have labor problems --- Stokes

FS provides volume for viable ops.

Then one or two big mills. Being renovated.

127 "furnace-type" ops, in & out, small.

12 year terms - based on life of mill.

Decker L.

Upst price, 5¢ / unit. (on the 12 yr. term)
Cash in advance

Reforestn. is covered in 3-yr. cutting permit

Les Reed

PS&U, Burn L.

100 mbf @, 2 sawmills

1. Direct chips, hold down price.
2. Some firms are holding excessive reserves.
3. Cert limited to "allowable."
4. Isolizes scale.

Interior stumpage is priced on milling basis, less cost.

Ocean " " " log market basis.

7: Mead Conf.

B.C. Forest policy.

1. Low grading required, at high net cost. This cost imposed on lessees reduces stumpage. Rationalized by 1 day benefit, multiplier, etc. Answer: the multi, if any, are based on value (over)
2. Stumpage based on gross volume, coupled w. low-grading required. occupies 40% of staff time to police woods & be sure they low-grade.
3. Decentralization, a major forced policy. Rationalized thus:
 - a. Regional devt., spread thin, "save Vancouver"
 - b. "Community stability."
 - c. Sustained yield.We cut 1/80 of good PS&Us, hold the rest stagnant, while cutting prematurely up north. Enforced sprawl. (Is one reason we have no int'l.)
4. Prohibition of log exports. (virtual) (over)
Keeps local price down. subsidizes local mills.
Holds down stumpage.
Allows monopoly by local mills. Pulp mills, esp. Beyond that, we export "market pulp", stock for paper & kraft mills elsewhere. (over)
5. Biological rather than economic-fuel concept, of maturity. So are cutting biologically decadent stands on marginal land, but not cutting fully mature trees on good sites.
6. Vert. intn. Long term supply contracts for each mill. Alt. is contract logging, inventory of logs, sorted perhaps, sold to high bidder.

At end of Mead's conf., this rationalization will have emerged as basis of B.C. policy, grounds for a new conf.

of product, so the altern. uses of the labor by producing higher products, wd. produce more mults. & delay benefits.

Of course, they might be outside the province.

But if you argue we shd. import labor at \$60 to produce output worth \$30 so as to divert or occupy other resources to add value to this feedstock, then:

- a. Why not do the same for all activities?
 - b. Why favor growth for its own sake?
 - c. Why tax other activities to subsidize this one?
-

3. (Cont.) So there are areas that everyone wants to get into that are held back. (Kinquait?) Operators want to move nearer Vancouver. Maybe much land in forests has higher uses in farming or townsites, if F.S. wd. let go!

5. (cont.) I.W.A. is also used to this system, has interests in it, might resist change, esp. exports. But cd. be given more jobs by Ag volume cut, etc.

7. Price of ^{lumber} ~~logs~~ is ~~constant~~ fluctuating. Stumpage rates change with lumber price. (But one indy. man complained stumpage was rigid, - at COFI mtg.) To govt. shares risk.

8. Indy. has learned to live w. present policies & fears change.

9. Policies almost surely have bn. influenced in the past by intst. power of whole province in one ownership.

Yet the demand has risen so, is probly more elastic now. Demand study needed.

(The mnpj doesn't even have the mnpj advantages of effie. Has divided prodn. up like a cartel.)

10. Timber sales are in large blocks, over many yrs.

11. Sustained yield. Allowable cut. An uncontrolled inventory.

12. Firms required to continue producing at steady rate when lumber or pulp prices fall.

Another cost imposed in name of "Comm. Stability."

Indy. wants more yr. to yr. flexibility.

13. "Water lots" used to store inventory ... below mbt.

14. Reforestation shared between indy. & govt.

15. Crown manages forest land. Indy. gets timber

rt's. and mills the product.

16. Multiple use has cut into timber cutting in some areas -- more than grassland.

17. Since "overmature" is interpreted biologically, it lends to bogey that a policy of cutting overmature wd. bring instability.

In ec. reasoning, cutting more will create counterforces - like lower price - to change maturity of virgin.

18. MB had strategy of buying up Temp. Tenures to control a drainage.

Bob W. opened access to drainages, let others thru. Is also planning to recoup Temp. Tenures.

19. As part of cutting right, Crown directs chips. But doesn't control price.

20. "Temp. Tenures"	2 m.a.
TFHs	20 m.a.

21. ~~the~~ B.C. sometimes auctions, but uses oral auctions rather than sealed bids.

Agenda

1. Ask Juhasz to explain
 - a. Stumpage ^{is} higher in interior. 60% higher in interior. Cfg. PG distr. vs. Vancouver Distr. Doug. Fir on coast, \$18 per cu. vs \$21 in P.G.
 - b. Are making tree farms in interior but not on coast.
 - c. T S H L "quota system".

2. Write ^{Julius} ~~Henry~~ Smith list of discs. in indy, ask reactions.

3. Needed: Data on jobs in forest indy., factor propus., etc.

Generally, unions shd. be on side of faster cut, & regen.

Adjusting policy to make more jobs, etc.

J. Juhasz, Dec. 13, '73.

Stumpage rates should be higher on coast; but are higher in interior. Res. lumber sales are used in interior, while log trading is used in Vanc. Log Mkt. i.e., F.S. uses (over)

a "100" is a unit, 100 cu. ft., or 4.64^3 ft.

Standard of utilization is ~~better~~ closer in interior. Trees there are all smaller, so mills are keyed to smaller stuff. Lodgepole is a major species, & it is small.

Also, coast is ~~flatter~~ steeper, interior terrain is easier logging.

Mills on coast are older, obsolete.

Sloan report is best source to understand tenures.

Timber Stand Harvest License.

TSHL, most common cutting tenure in public units.

Is 10-yr. tenure. Co. must do some reforesting.

a recent tenure. Before that, it was 1-3 yrs, & got reforested.

Then, amalgamated one drainage, all ops. got TSHL.

~~On TFL.~~

The TSHL is the equivalent for "public" units of the TFL. (Is the TFL more private?)

Rothery resid. method. In interior, product is sold as lumber, and the price is a true base from which to begin.

On coast, products sold as logs, valued in VLM, and they are undervalued. There is much swapping, logs for logs.

7: Mead Conf.

ask Julius J. to take a leave to work on evaluating
B.C. Forest Policy.

Evaluate his Conf. performance first.

Tues Dist. foresters

7: Conf. on Forest

90% comes from old growth. Wally

Everybody wants to go into Kimsquit, & other best stands

"Overmature" is interp'd in biological sense, not fuel. This creates
bogy that cutting overmature will cause serious instability.

Strategy of M.B. Buy up all temp. tenures that
control a drainage

In Finland, 50% comes from thinning. Bill ^{Young} ~~Laird~~

Crown can direct chips as part of cutting right. Monopsony
in chips. Export may be the answer.

Pulp sells for \$250/ton.

Chips, \$10-12/ton.

Chips come from sawmill, so Crown has lost control.

TFL, 20 m a, 20 yr. contracts

It costs \$30 to chip roundwood. Cos. do that, to avoid
bidding up chips.

Japanese are paying \$38 for chips in Vancouver.

We export merchant pulp, instead of kraft, paper, etc.

{ \$80 Scribner is stumpage in B.C. } Wally M.
 { \$100 in U.S. }

Weyah. bought in 1905 at 5¢ per MBF. to W. mills
 butchered the stuff - they have so much, so cheap.

1/3 of Vanc. Island is E&N grant.

W. now starting to sell logs, bcs. their own plants
 are so ineff.

Now selling cedar at \$400 MBF to Japan.

No tariff on lumber, U.S.

"Appraisal is always below what" - W. Mead.
 Lesson from USA.

OCS is all sealed bidding, U.S.

B.C. uses oral auctions. Only used sealed bid once, then
 failed to advertise in Japan & USA.

Unions will squeak. I.W.A. wd. be a problem.

Oil bidding has worked. W. Mead. Partial OCS
 leases went to big firms. Now, little guys are coming
 in and ~~out~~ winning bids.

In B.C. we gave little guys mny. position, then

big guys came in & bought them out.

"Quota system". TSHLs are expiring
Now going on 12 yr TSHL - a 12 yr. supply of
timber, so much volume.

W. Mead suggests sell a 2 yr. supply plus rt. to bid
after 2 yrs -- a series of small sales.

TFLs were originally in perpetuity.

WM wants indy. as harvester only.

2 m cubic is 12 mb f Submer

Create a log mkt., disintegrate the indy. Guarantee a
supply for which all can bid.

We are stuck w. large mills

Rationale for ^{forced} decentralization is sustained yield. Refute
systematically.

Interior, we are making tree farms, and on coast, not.

Get "stumpage is just as high in interior." Juhász.

One argument is long benefits. Gross
Value-added along the way

Dec. 16, 1913

7: Mead Conf.

More thoughts on B.C. Forest Policy.

1. Lack of rev. from stumpage, another problem. Crown grants made before 1881, E & N Rwy, a big problem, little or no royalty.

2. Evidence of locking up.

a. "Certified tree farms", are tax free for termers, but are occasionally withdrawn & sold, at "high price v.e."
— Walter Hughes, Pr. Report Dist. Forester.

We are so overbalanced w. wood shed, make every effort to diversify, get land into other uses if it has any capability. I recommend selling as much as possible.

b. ^{Try} ~~the~~ land-use capability maps for this purpose.
Maybe they located good farm land in crown forests.

1, (continued)

T.F.L.s include much Crown land, along w. some prv. land.
Rented for 1¢ per acre, i.e. nothing.

Object is S.G. — i.e. a lockup. Object was to lock up prv. land, originally. "Management" is euphemism for S.G. lockup.

3. F.S. feels satisfied when it has control of land — no need to get revenue.

4. Arbitrary policy to keep wood out of water.

Considering fjorded coast, $\frac{1}{2}$ province, & energy crisis, seems dubious.

Again, we pay in lower stumpage.

5. Is some ^{suggestion} ~~to~~ ^{that} ~~lower~~ ^{lower} grades are enforced in interior than in Vanc. dists. Bas. plants are geared to larger logs only. They are old & obsolete & shld. be replaced.

Here is an argument for comp. low-grading? Not really, bcs. this is a failure of compulsive approach. Faced w. obsolete plants, standard was lifted.

Low-grading in Okanagan forces ^{"injuring"} ~~loss~~ of some ~~not~~ wood on steep hills, slow recovery, shldn't be taken.

Dec. 9

7: Mead Conf.

11

District Foresters

1. Vancouver Distr. Pogue (?) Mickey.

Obsolete plants

Famous for high-grading down here. 12" plants geared for.
Water lot rents still rise 8-fold. R. Wms.

\$400/acre ~~per yr~~ stumpage, we get.

If we tell them to take out submerged wood, we pay for it. -

Jukasz.

Tenn. (Walter Hughes)

Brownshir wants to bring grade down to 7" to slow down
cut of virgin.

then policy to keep wood out of water.

"Higher" sites, bottom of drainages, have gone to alder. 40 yr.
maturity.

2. Brownshir. Walter Hughes, Pr. Rupert.
Certified Tree Farms were used

We shd. say what timber is for sale; now, rather, firms
tell us what timber they want. Result: we build too
many road-routes.

PSGU boundaries are purely at fault. They are
rigid, & obsolete -- as xptn changes.

Given freedom, loggers sneak down coast as near to
Vancouver as they can get. - Ralph Robinson.

12

Some areas, indy. pulps for faster cut than allowed.

Kitimat Valley case was a fast cut-out. Regards now as bad.

3. Green Coat

Seedling stands ^{of cedar} on best logging sites. Res. chips aren't worth enough.

Chip price is controlled in B.C. — by buyers.
They are underpriced. — R. Wms.

Sawmills have 5-10 yr. contracts, fixing chip price.

4. ~~Green Coat~~ Yellow Shirt. Caribou Distr. P.L. distr. Eric.

F & S. shd. manage timber.

(Wet belt in this distr. is east, in Quinsam Lakes)

In wet belt have cedar, a problem.

5. Blue shirt, short & fat. Al.

Creaming is a problem. They seek to enforce low-grading.

But in Okanagan, low-grading forces them to get stuff on steep hills, etc., that maybe can't be replaced & shldn't be taken.

6. Ken Reid

(They speak of need to Δ revs, but not of need to get revs. sooner.)

"They're not on allowable cut, outside the licenses"
About half of Old Temp. Trunks are outside TFL.
Are they managed much differently?