Sustainable Forestry Or the Green Illusion?

Avoiding Highgrading with Variable Retention

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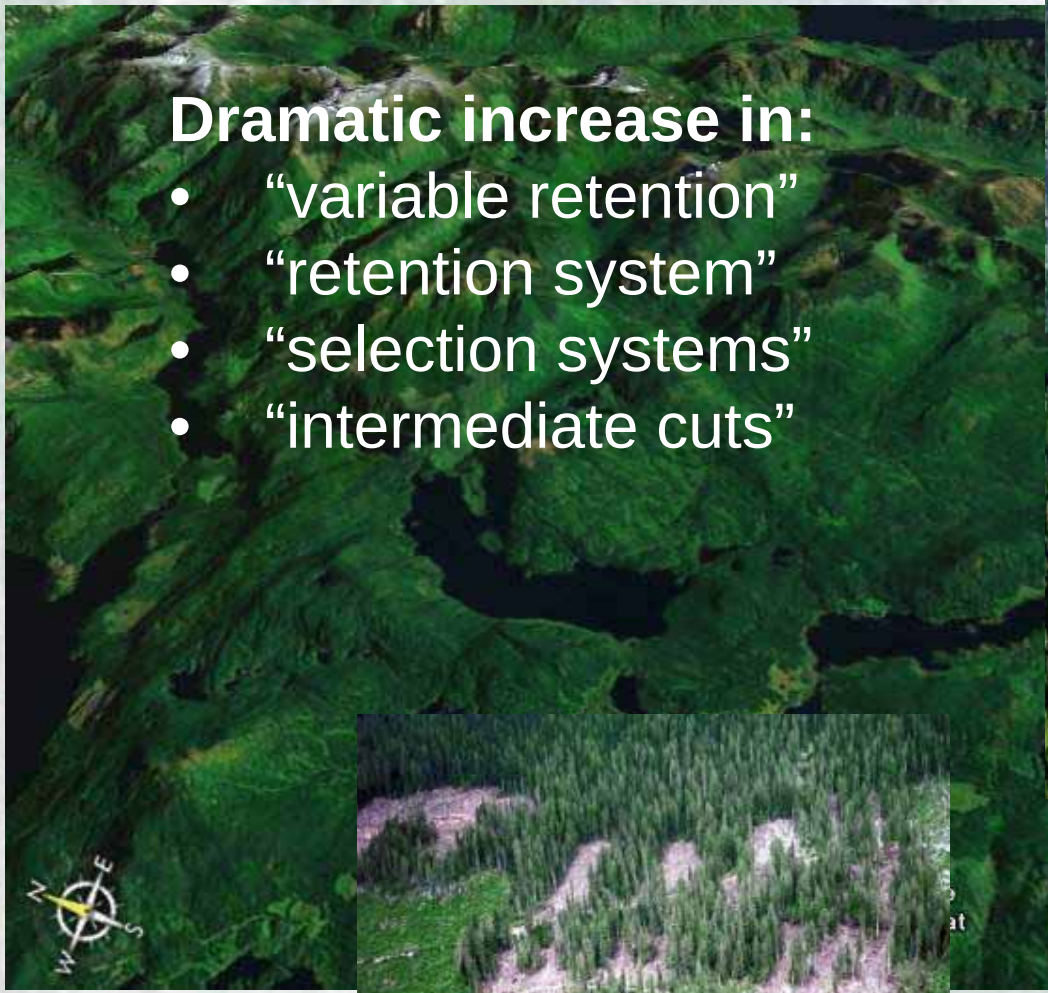
The term “the Green Illusion” we credit to…

The Honorable Frank Oberle,
Logger and PC member of parliament for Prince George-Peace River (1972 – 1993)

Partial Cutting in Coastal BC



Dramatic increase in:

- “variable retention”
- “retention system”
- “selection systems”
- “intermediate cuts”

Variable Retention- an overarching concept

Key points:

- Retention is **long term (rotation)**
- Retention is **well distributed**
- **Variable is a key**
- **The full suite of silvicultural systems** can be used

The Retention System…

- was developed for Variable Retention

- **A “new” silvicultural system**
- **Designed to:**
  1. Ensure good distribution of retention
  2. Credibly differentiate the approach from clearcutting

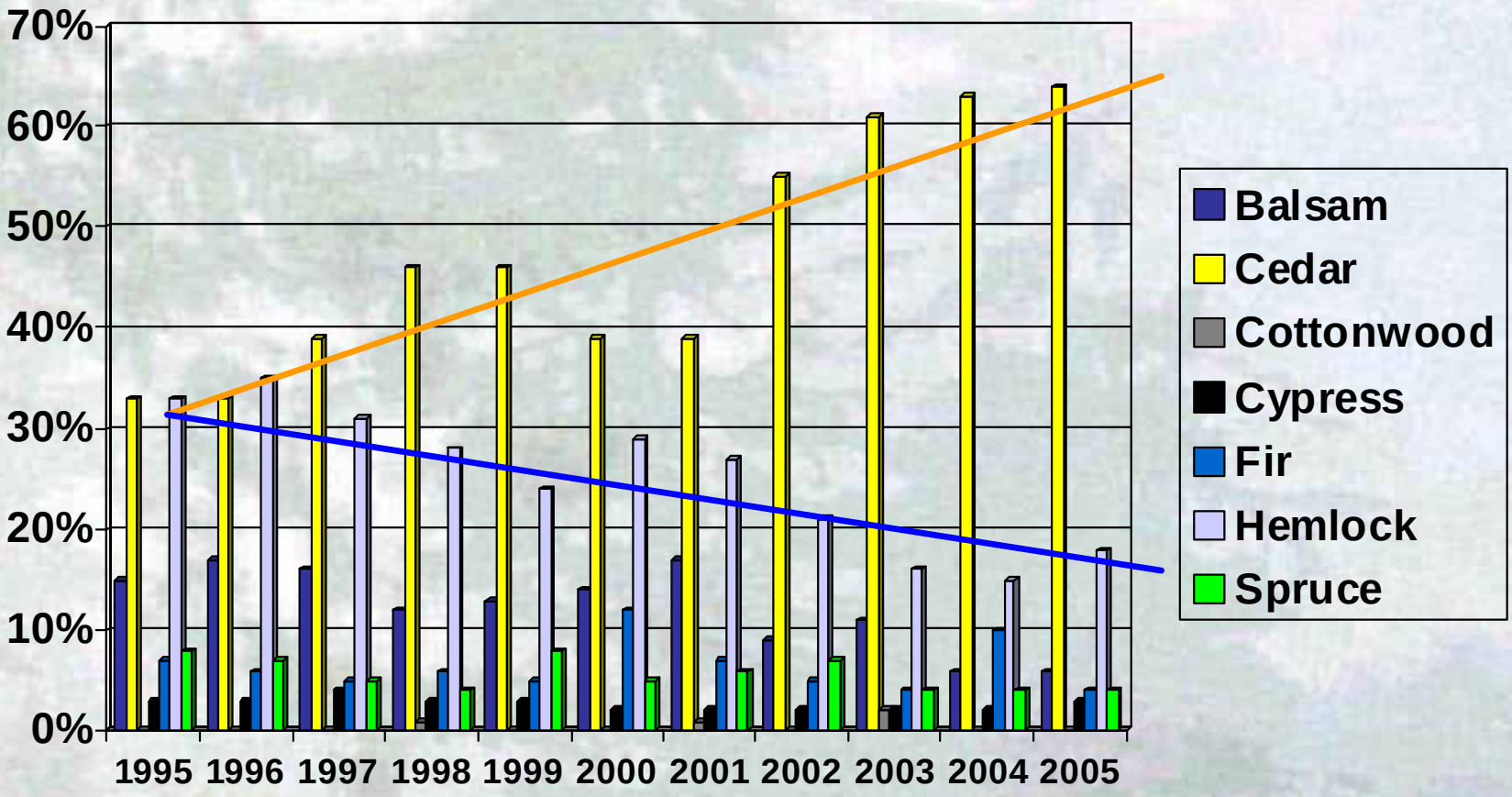
Recently – Partial cut trends (BC Coast)

	99	03	05
“Selection System”	1%	4.7%	0.4%
“Retention System”	3%	40%	49%
“Intermediate Cuts”	1%	2%	1%
TOTAL	**5%**	**47%**	**50%**

PROVINCIAL RESULTS DATABASE

Meanwhile what species are we removing?

A Coastal TSA - from harvest billing system data



Approaches to Retention

Heli-logging small gaps seem to be more common

Is this Sustainable Forestry or…

A GREEN ILLUSION?

What do we mean by the Green Illusion?

- Stands stuck with little growth potential – they look green, and maybe good from afar – but potentially far from good within…

What does the future hold for these stands?

What do we mean by the Green Illusion?

- Take the best and leave the rest
- Prompted emergence of modern forestry

What is Highgrading?

The removal of only the best trees from a stand, often resulting in a residual stand of poor quality trees.

BCFS glossary

CONCERNS?

- **Reduced value and productive sustainability.**
  - **Future harvests** may be uneconomic, and/or,
  - **Growth** may be poor, perhaps negative.

MacMillan Bloedel had to deal with this issue

1998 - Critics suggest new MB approach is just highgrading in disguise.

- **Implementation Guidelines were designed**
- **Monitoring was conducted**

Four Principles to Avoid Timber Highgrading:

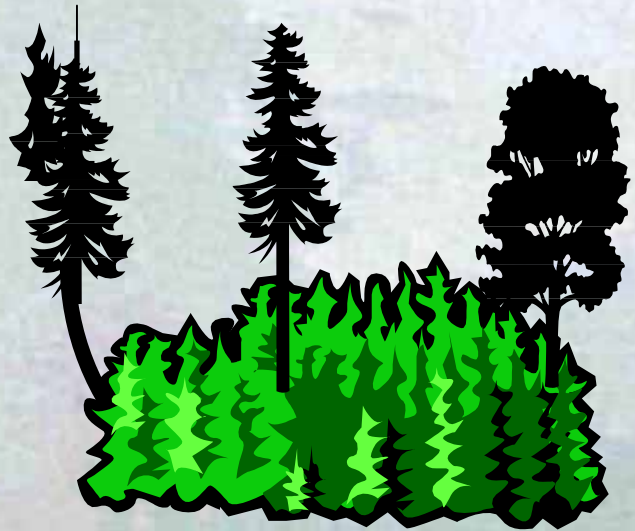
W. J. Beese – 1999 (MB / Weyco)

1. **Regenerate desired timber species**
   - Provide conditions for establishment &
   - Suitable growing space

2. **Achieve productivity and quality expectations over time**
   - Create conditions for acceptable long-term growth &
   - Conditions for realization of value

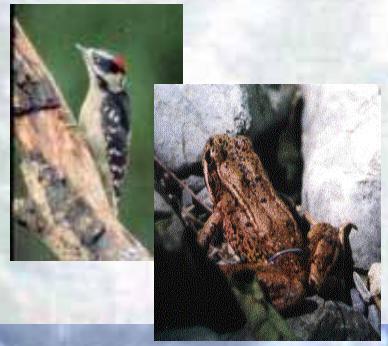
3. **Maintain a healthy gene pool**

4. **Avoid a decline in stand health**



What about non-timber objectives?

- **Habitat?**
- **Visuals? Etc.**

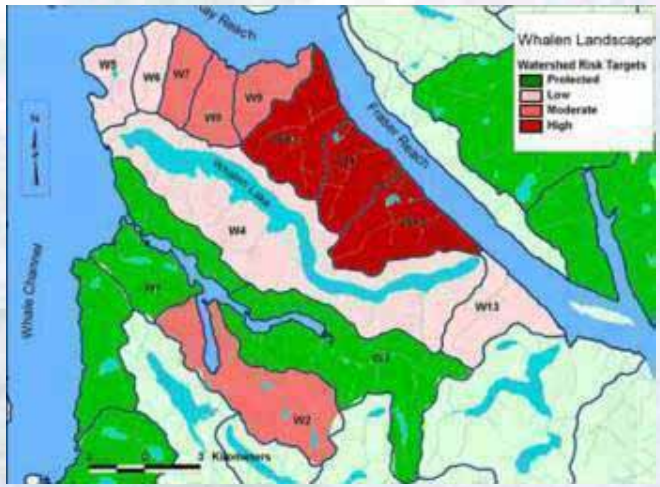


- **Can we manage structure for these objectives without highgrading for timber values?**

To be sustainable forestry…

Must have a reason for the retention

- Targets for retention levels
- Linked to clear objectives in a SFM plan.



- WITH realistic linkages to allowable harvest determinations

Also at the stand level…

Retention should be tied to a credible silvicultural system:

A long-term approach to stand management that fits with:

- Stand type
- Ecological conditions

Designed to meet

Expected outcomes

- **Timber volumes and values**
- **Habitat and other non-timber objectives**

Also at the stand level…

For high levels of retention what are the silvicultural system options?

Irregular shelterwoods – entries beyond 20 years

Selection systems – planned reentry periods – group, single tree – if so what is the plan?

Other systems? - that would further open up the overstory allowing for regen establishment and growth.

A new perspective on highgrading:

IN A NUTSHELL - HIGHGRADING IS:

- **Sacrificing the sustainability of the stand for any of its primary values (timber or non-timber).**
    - **FOR short term gain today.**

Setting Parameters to Avoid Highgrading:

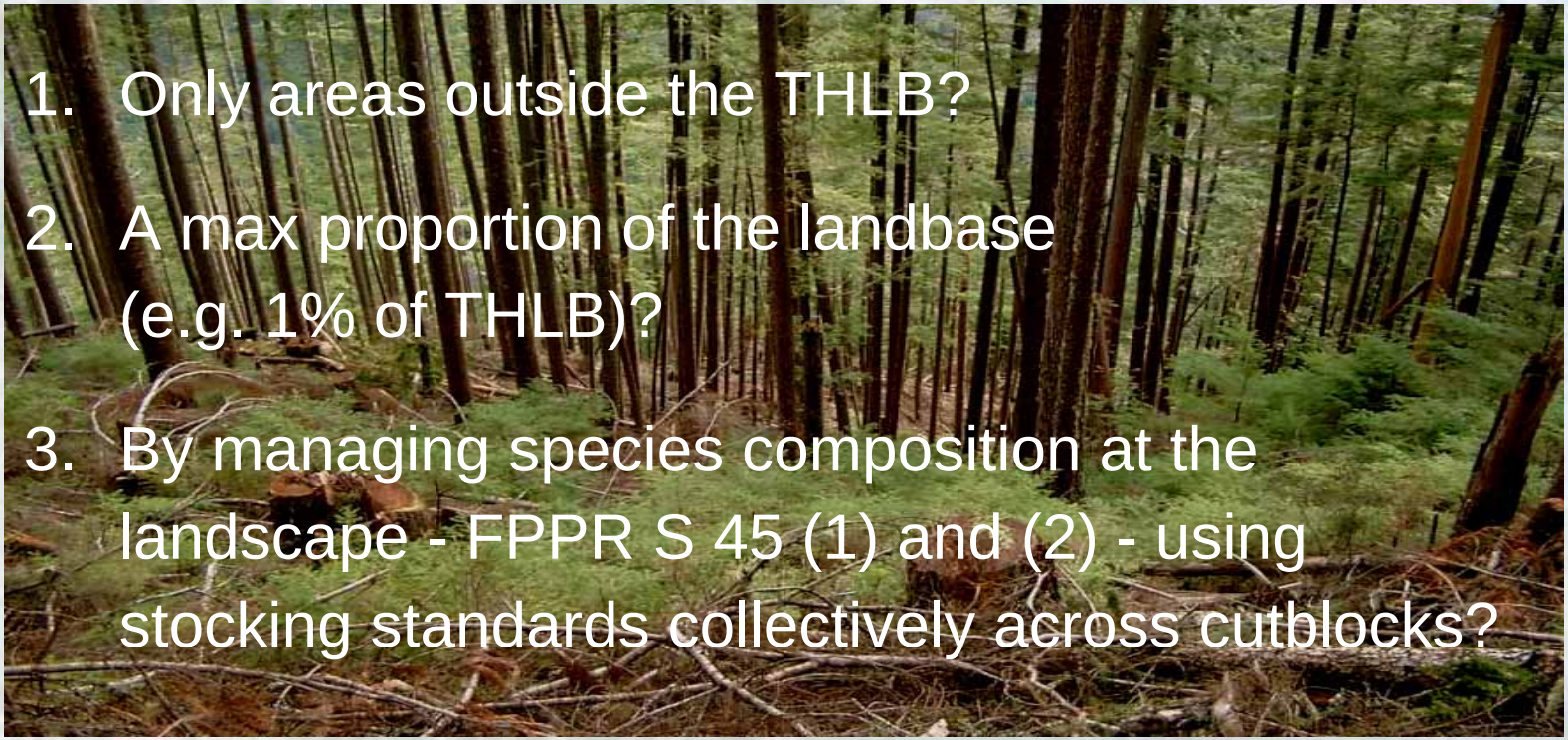
KEY = Must know:

- What are the values?
- What are the tradeoffs?

- What are the objectives for sustainability?
- How much latitude do we have to manipulate structure right now?
  - How much risk are we willing to accept?

Are there exceptions?

Can we restrict low volume single entry removals targeting valuable species to…



1. Only areas outside the THLB?
2. A max proportion of the landbase (e.g. 1% of THLB)?
3. By managing species composition at the landscape - FPPR S 45 (1) and (2) - using stocking standards collectively across cutblocks?

Some thoughts on exceptions…

FOR: ALL proposed exceptions…

- **Harvesting should still fit with all non-timber mgmt objectives**
  - Now and over time
- **The situation should be transparent.**
  - Stakeholders and the public should be aware of the tradeoffs.

Some thoughts on exceptions…

FOR: Restricting it to areas outside the THLB?

- Should there be an **upper limit** applied to this? (hectares)
- Restricted to certain **situations/ circumstances** (e.g., Class V terrain)?

Some thoughts on exceptions…

FOR: Restricting it to a max proportion of the landbase (e.g. 1% of THLB)?

- Once these areas are logged **should they be removed from the THLB, or reclassified in the inventory?**
  - Will they realistically ever be logged in the near future?
  - How much growth are they contributing?

Some thoughts on exceptions…

FOR: Managing species composition at the landscape (collectively across cutblocks)?

Is this just a species issue?

- Will these areas realistically ever be logged in the near future?
- How much growth are they contributing?
- Should they be reclassified within the THLB?

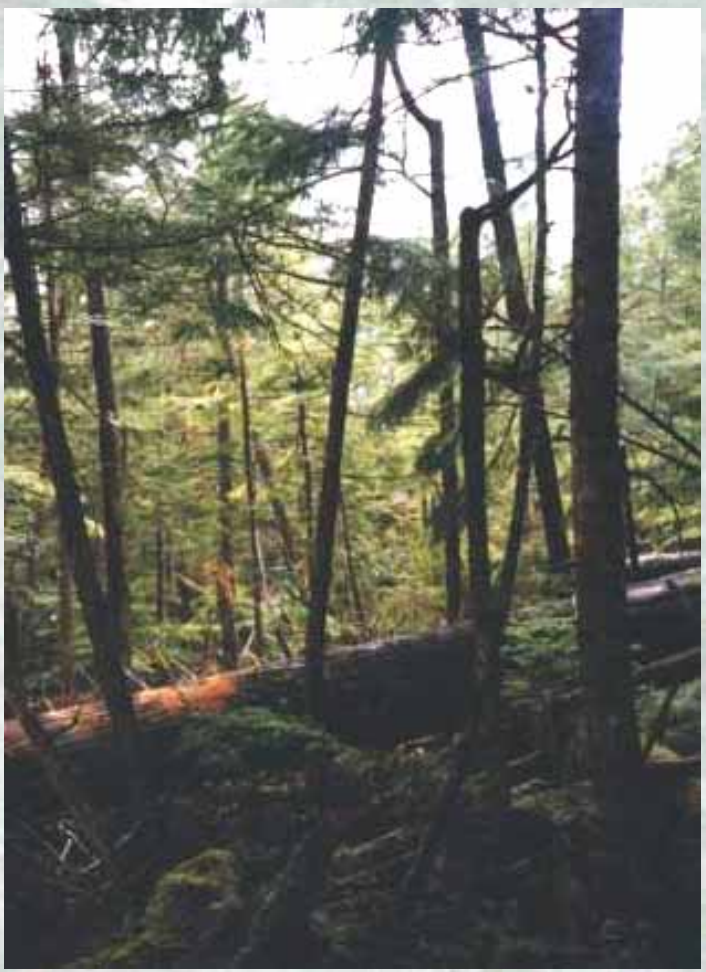
Remember…

Single-entry harvesting, targeting individual high value trees – is not evil…

It just isn't forest management.

Remember…

You are in control – make it sustainable



Avoid the green illusion, your kids will appreciate it!

Thanks