

# Sampling Intensity for Stand-level Biodiversity Surveys

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# What we did

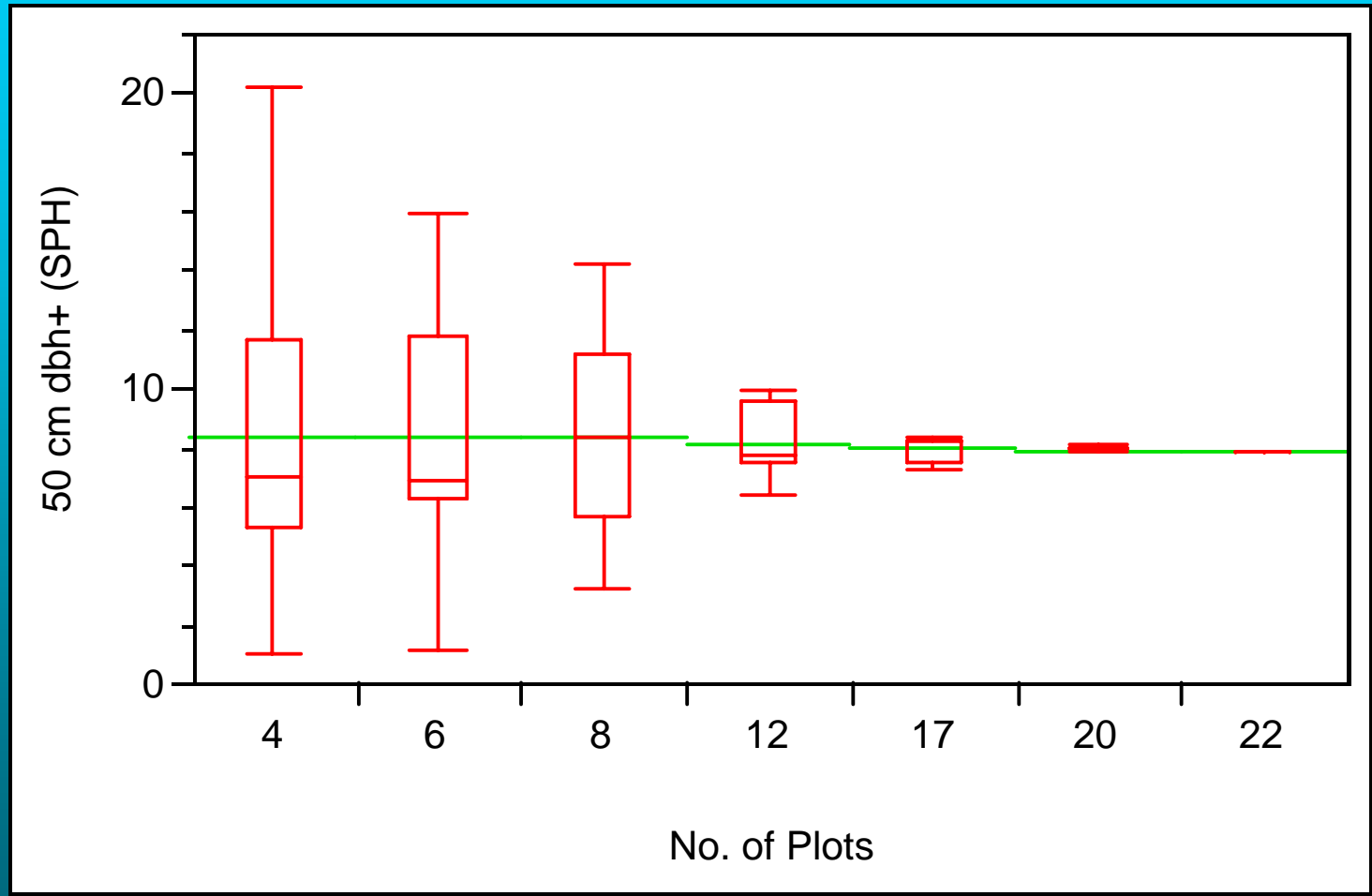
- Plastered 2 blocks (DKA & DMH) with plots
- Analyzed the data in a whole bunch of ways
- Figured out changing indicator bias (don't want any) & precision (targetting < 35%)

# 100 Mile House ID 2964

- 50 hectares
- SBPS mk
- 1 WTP 3.3 ha
- 3 distinct strata in NAR – dispersed
- 22 plots put in
- 6 recommended
- 27% retention (20% dispersed)



# What we found DMH

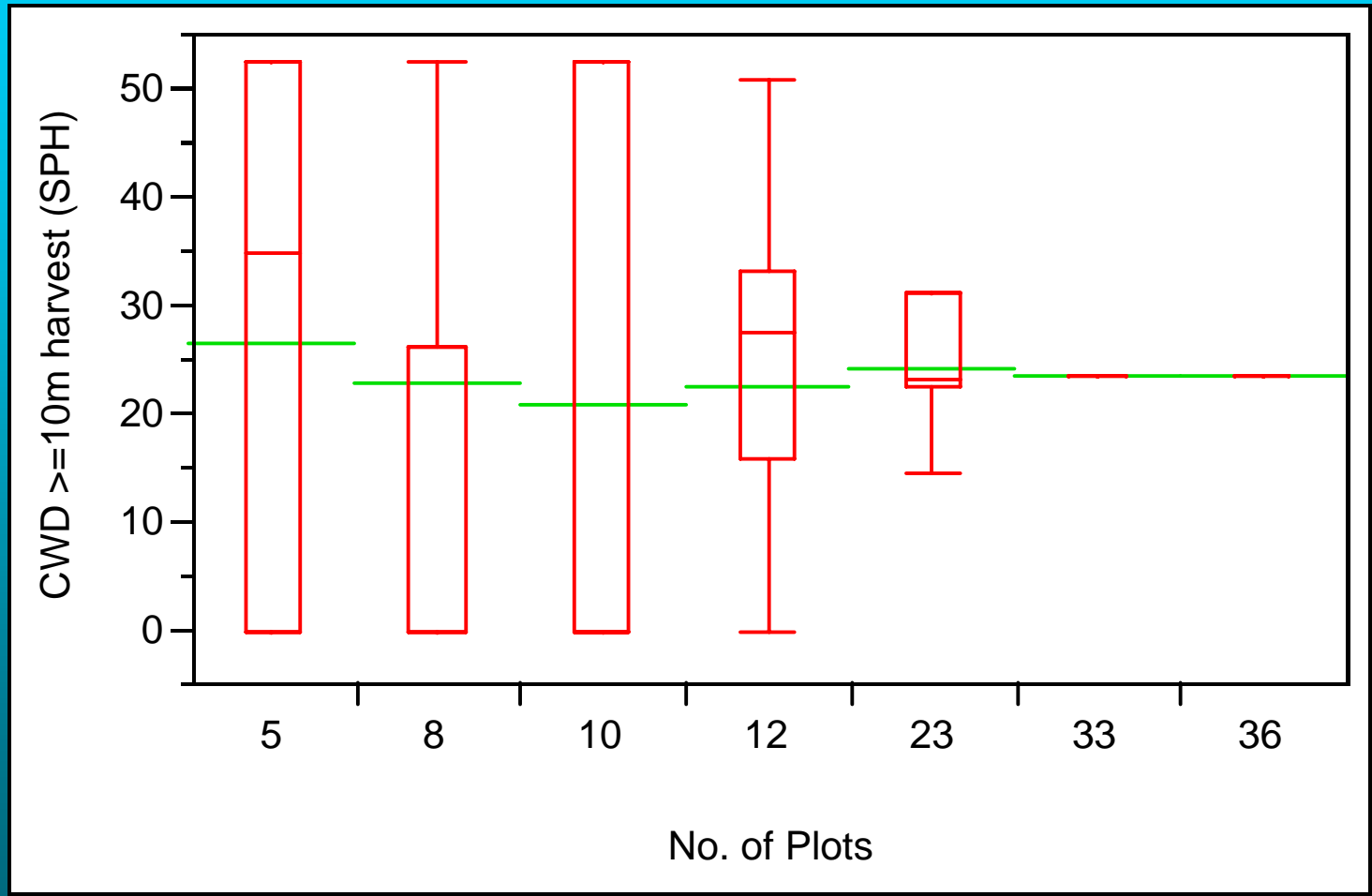


# Kalum Opening ID 96275

- 38 hectares
- CWH ws
- Five retention patches total 11 ha
- No dispersed
- 36 plots established
- 12 recommended
- 28% retention (all from patches)



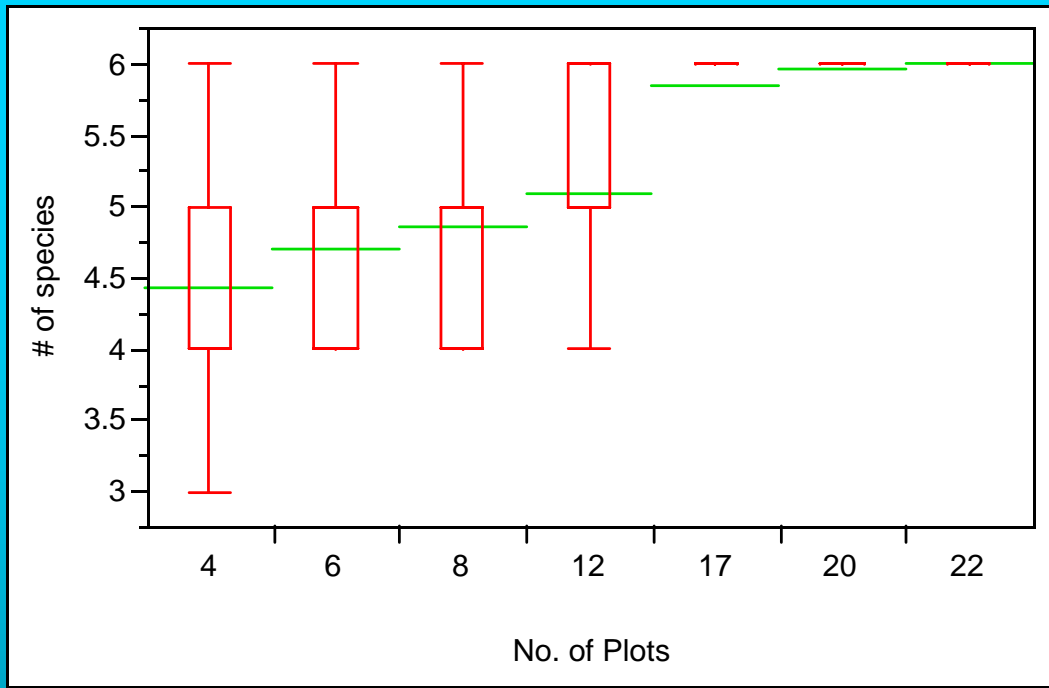
# What we found DKM



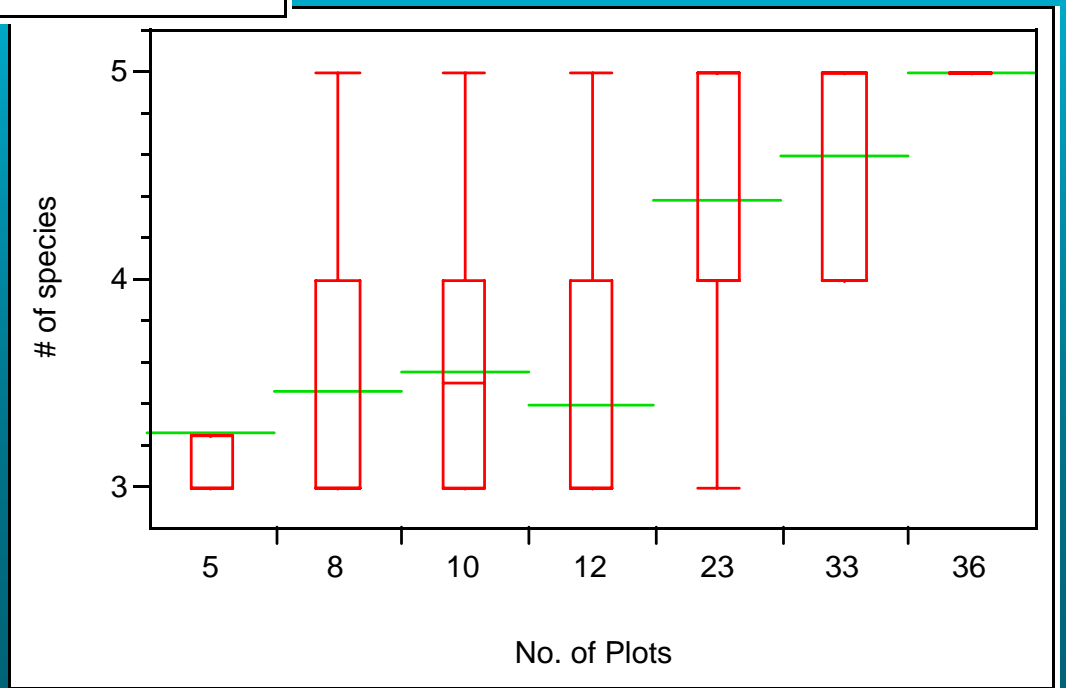


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100 Mile



Kalum



# Conclusion

- # of tree species found highly dependent on sampling intensity
  - Comparisons must be with similar datasets (or modelling to make them similar)

# Conclusion continued

- Precision low for large snags
- Precision for large trees and CWD adequate for recommended plots
  - Except more plots recommended for high levels of dispersed WT's.



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# Opinion vs. Risk Ranking

## **Done to help us understand:**

- What staff look at when rating blocks
- Strengths and weaknesses of the indicator risk ranking
- How to improve the biodiversity indicators

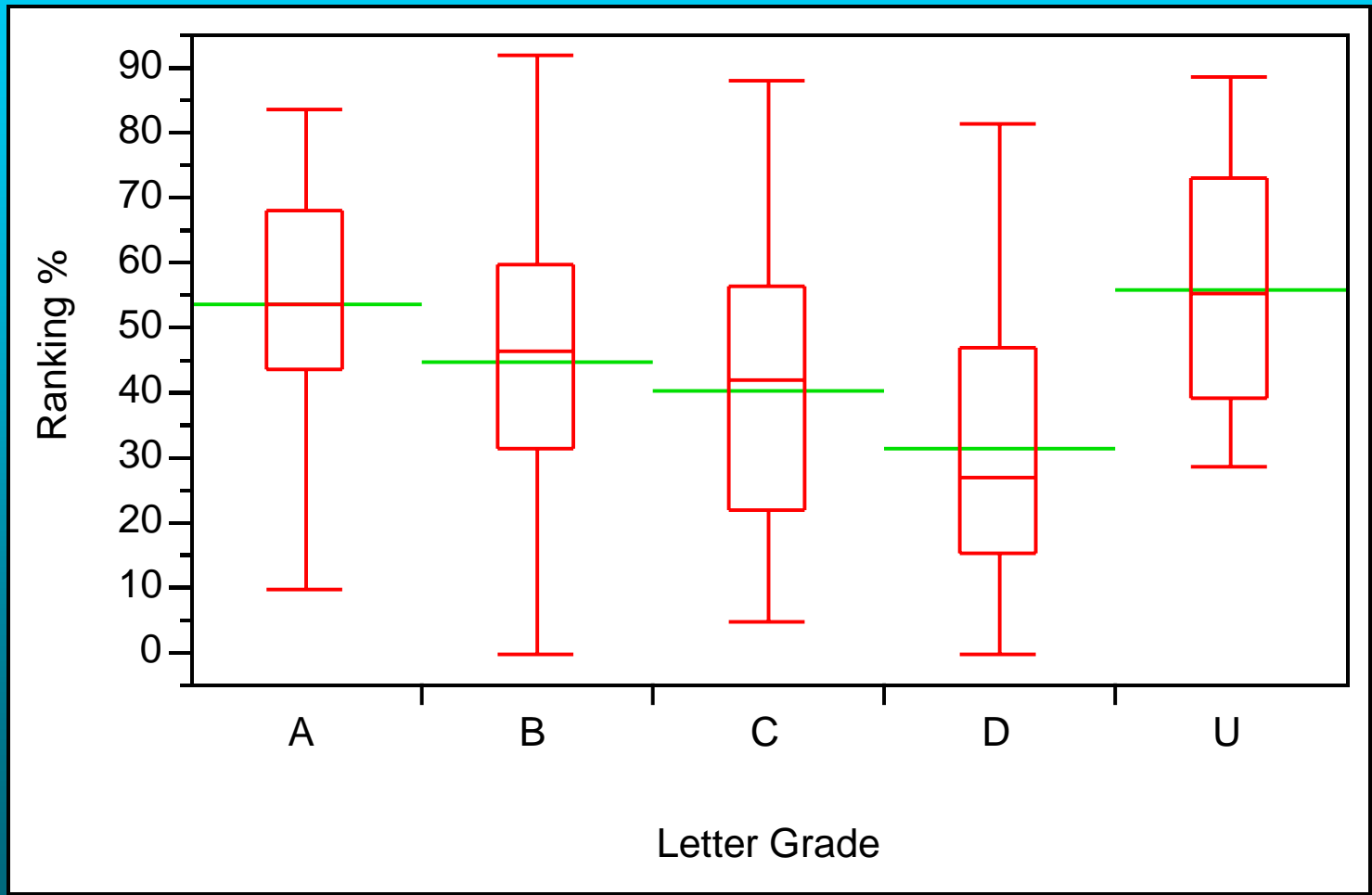
## Assessor Opinion

Excellent	A
Well	B
Moderately	C
Poorly	D
Unknown	U

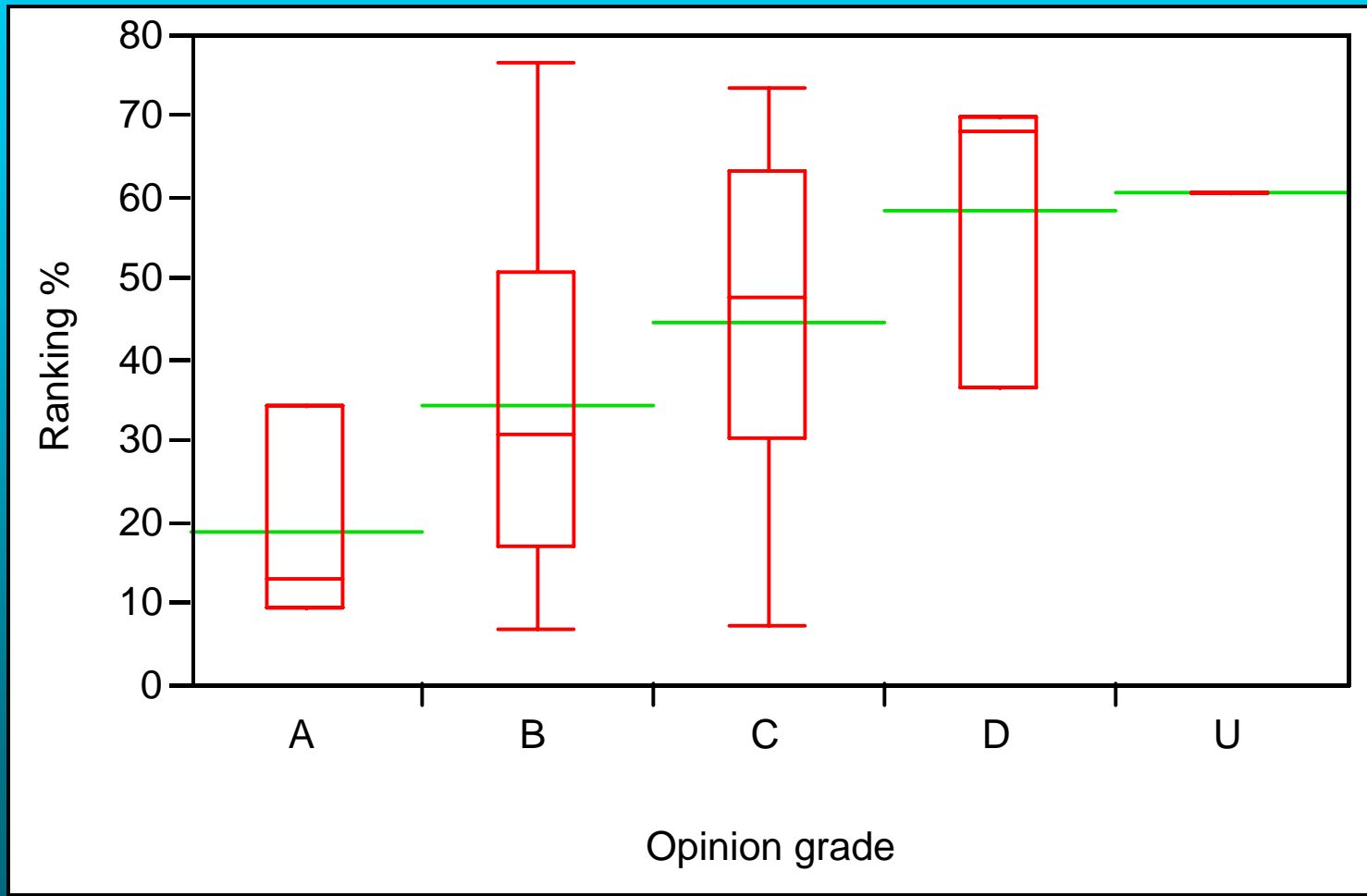
## Risk Rating

- Based on comparison of indicator values to baseline or targets
- % of total

# Total comparison goes the way we'd guess!



# But .... 4 districts disagree



# On a closer look

- ID116199
  - 100% retention! Even retention throughout. Eco anchors in harvested area (therefore opinion grade of “A”).
  - But few big trees, dead trees or large snags and we don’t give points for eco anchors in harvested area (risk ranking of 22.7%)

# On a closer look

- ID 113789
  - Stream sedimentation, poor roads, high windthrow (therefore opinion grade of “D”)
  - High windthrow, good ecological anchors, good patch size, large snags, large trees and good CWD volume (risk ranking of 69.9%)

# Conclusion

- Some inconsistency comes when retention is temporary
- Ecological anchors in harvest area need to get “biodiversity ranking”
- High amounts of retention with little “dead wood” always gets low ranking